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(54) Title: PROTEIN-PROTEIN INTERACTIONS IN *HELICOBACTER PYLORI*

(57) Abstract: The present invention relates to protein-protein interactions of *Helicobacter pylori*. More specifically, the present invention relates to complexes of polypeptides or polynucleotides encoding the polypeptides, fragments of the polypeptides, anti-bodies to the complexes, Selected Interacting Domains (SID[®]) which are identified due to the protein-protein interactions, methods for screening drugs for agents which modulate the interaction of proteins and pharmaceutical compositions that are capable of modulating the protein-protein interactions.

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PROTEIN-PROTEIN

INTERACTIONS IN *Helicobacter pylori*

FIELD OF THE INVENTION

5 The present invention relates to proteins that interact with *Helicobacter pylori*. More specifically, the present invention relates to complexes of polypeptides or polynucleotides encoding the polypeptides, fragments of the polypeptides, antibodies to the complexes, Selected Interacting Domains (SID®) which are identified due to the protein-protein interactions, methods for screening
10 drugs for agents which modulate the interaction of proteins and pharmaceutical compositions that are capable of modulating the protein-protein interactions.

In another embodiment the present invention provides a protein-protein interaction map called a PIM® which is available in a report relating to the protein-protein interactions of *Helicobacter pylori*.

BACKGROUND AND PRIOR ART

15

Most biological processes involve specific protein-protein interactions. Protein-protein interactions enable two or more proteins to associate. A large number of non-covalent bonds form between the proteins when two protein surfaces are precisely matched. These bonds account for the specificity of
20 recognition. Thus, protein-protein interactions are involved, for example, in the assembly of enzyme subunits, in antibody-antigen recognition, in the formation of biochemical complexes, in the correct folding of proteins, in the metabolism of proteins, in the transport of proteins, in the localization of proteins, in protein turnover, in first translation modifications, in the core structures of viruses and in
25 signal transduction.

General methodologies to identify interacting proteins or to study these interactions have been developed. Among these methods are the two-hybrid system originally developed by Fields and co-workers and described, for

example, in U.S. Patent Nos. 5,283,173, 5,468,614 and 5,667,973, which are hereby incorporated by reference.

The earliest and simplest two-hybrid system, which acted as basis for development of other versions, is an *in vivo* assay between two specifically
5 constructed proteins. The first protein, known in the art as the "bait protein" is a chimeric protein which binds to a site on DNA upstream of a reporter gene by means of a DNA-binding domain or BD. Commonly, the binding domain is the DNA-binding domain from either Gal4 or native *E. coli* LexA and the sites placed upstream of the reporter are Gal4 binding sites or LexA operators, respectively.

10 The second protein is also a chimeric protein known as the "prey" in the art. This second chimeric protein carries an activation domain or AD. This activation domain is typically derived from Gal4, from VP 16 or from B42.

Besides the two hybrid systems, other improved systems have been developed to detect protein-protein interactions. For example, a two-hybrid plus
15 one system was developed that allows the use of two proteins as bait to screen available cDNA libraries to detect a third partner. This method permits the detection between proteins that are part of a larger protein complex such as the RNA polymerase II holoenzyme and the TFIIH or TFIID complexes. Therefore, this method, in general, permits the detection of ternary complex formation as
20 well as inhibitors preventing the interaction between the two previously defined fused proteins.

Another advantage of the two-hybrid plus one system is that it allows or prevents the formation of the transcriptional activator since the third partner can be expressed from a conditional promoter such as the methionine-repressed
25 Met25 promoter which is positively regulated in medium lacking methionine. The presence of the methionine-regulated promoter provides an excellent control to evaluate the activation or inhibition properties of the third partner due to its "on" and "off" switch for the formation of the transcriptional activator. The three-hybrid method is described, for example in Tirode et al., *The Journal of Biological*

Chemistry, 272, No. 37 pp. 22995-22999 (1997) incorporated herein by reference.

Besides the two and two-hybrid plus one systems, yet another variant is that described in Vidal et al, *Proc. Natl. Sci.* 93 pgs. 10315-10320 called the
5 reverse two-and one-hybrid systems where a collection of molecules can be screened that inhibit a specific protein-protein or protein/DNA interaction, respectively.

A summary of the available methodologies for detecting protein-protein interactions is described in Vidal and Legrain, *Nucleic Acids Research* Vol. 27,
10 No. 4 pgs.919-929 (1999) and Legrain and Selig, *FEBS Letters* 480 pgs. 32-36 (2000) which references are incorporated herein by reference.

However, the above conventionally used approaches and especially the commonly used two-hybrid methods have their drawbacks. For example, it is known in the art that, more often than not, false positives and false negatives
15 exist in the screening method. In fact, a doctrine has been developed in this field for interpreting the results and in common practice an additional technique such as co-immunoprecipitation or gradient sedimentation of the putative interactors from the appropriate cell or tissue type are generally performed. The methods used for interpreting the results are described by Brent and Finley, Jr. in *Ann.*
20 *Rev. Genet.*, 31 pgs. 663-704 (1997). Thus, the data interpretation is very questionable using the conventional systems.

One method to overcome the difficulties encountered with the methods in the prior art is described in WO 99/42612, incorporated herein by reference. This method is similar to the two-hybrid system described in the prior art in that it also
25 uses bait and prey polypeptides. However, the difference with this method is that a step of mating at least one first haploid recombinant yeast cell containing the prey polypeptide to be assayed with a second haploid recombinant yeast cell containing the bait polynucleotide is performed. Of course the person skilled in the art would appreciate that either the first recombinant yeast cell or the second

recombinant yeast cell also contains at least one detectable reporter gene that is activated by a polypeptide including a transcriptional activation domain.

The method described in W099/42612 permits the screening of more prey polynucleotides with a given bait polynucleotide in a single step than in the prior art systems due to the cell to cell mating strategy between haploid yeast cells. Furthermore, this method is more thorough and reproducible, as well as sensitive. Thus, the presence of false negatives and/or false positives is extremely minimal as compared to the conventional prior art methods.

One of the prokaryotic microorganisms studied by the inventors is *Helicobacter pylori*. *Helicobacter pylori* (*H. pylori*) is a microaerophilic, Gram negative, slow growing, spiral shaped and flagellated organism. *H. pylori* has been first isolated in 1983 from a gastric biopsy specimen of patient with chronic gastritis (Marshall et al., 1984, Lancet, 1:1311-1314, *Unidentified curved bacilli in the stomach of patients with gastritis and peptic ulceration*).

Helicobacter pylori has become identified as a primary cause of chronic gastroduodenal disorders, such as gastritis, dyspepsia, and peptic ulcers, in humans. Studies have shown (Labigne et al.) that *H. pylori* can be successfully eradicated by a treatment combining two antibiotics with a proton pump inhibitor. However, few antibiotics are active against *H. pylori* and antibiotic-resistant strains have begun to appear.

The *H. pylori* strain n° 26695 genome has been studied by Tomb et al. (Tomb et al., 1997, Nature, vol. 388, 539-547, *The complete genome sequence of the gastric pathogen Helicobacter pylori*). This strain's genome consists of a circular chromosome with a size of 1,667,867 bp, average G + C content of 39%, and 1590 predicted coding sequences (open reading frames or "ORF").

The availability of the entire genome sequence of two clinical strains, 26695 and J99 (Alm et al, 1999). (Tomb et al, 1997) has encouraged more global approaches to the functional analysis of the whole set of genes. In *H. pylori*, there is still as much as 42% of the *H. pylori* encoded proteins for which there is a need to assign biological function. Attempts to classify genes within functional

categories such as genes essential for viability, or conditionally essential in a given environment have been proposed by Akerley and collaborators (Akerley et al, 1998). This concept was first applied to *H. pylori* by Chalker et al. (Chalker et al, 2001) who analyzed for essentiality a set of genes selected by bioinformatic genome prioritization.

The bacterial factors necessary for colonization of the gastric environment, and for virulence of this pathogen, are poorly understood. Examples of known virulence factors are:

- Enzymes involved in neutralizing the acid gastric pH : the multisubunit urease is a characteristic enzyme that is crucial for survival in acidic pH and for successful colonization of the gastric environment, a site that few other microbes can colonize (Labigne et al., WO 93/07273, *Helicobacter pylori* genes necessary for the regulation and maturation of urease, and use thereof). Genes encoding ureases have been located on a 34 kb chromosome fragment and comprise ureA, ureB, ureC, ureD, ureE, ureF, ureG, ureH and ureI.
- Bacterial flagellar proteins responsible for motility across the mucous layer (Hazell et al., 1986, J. Inf. Dis., 153, 658-663 *Campylobacter pyloridis* and gastritis: association with intracellular spaces and adaptation to an environment of mucus as important factors in colonization of the gastric epithelium; Leying et al., 1992, Mol. Microbiol., 6, 2863-2874 *Cloning and genetic characterization of Helicobacter pylori flagellin gene*): flagellar filaments biosynthesis comprises A and B flagellins and the filament cap. These two biosyntheses are regulated by flbA gene (Suerbaum et al., French patent application, 1995, n° 2,736,360, *Cloning and characterization of flbA gene of Helicobacter pylori, aflagellated strains production*).
- Two other essential toxins for virulence are VacA and CagA.

VacA is a *H. pylori* toxin that induces the formation of large acidic vacuoles in host epithelial cells. These large vacuoles originate from massive swelling of

membranous compartments of late stages of the endocytic pathway (de Bernard et al., 1997, Microbiology, 26(4), 665-674, *Helicobacter pylori* toxin VacA induces vacuole formation by acting in the cell cytosol) Proof for receptor-mediated interaction with VacA has been made by Pagliaccia et al.; m2 allele of vacA gene
5 has always been described as inactive in the *in vitro* HeLa cell assay, however, the m2 allele is associated with peptic ulcer and is prevalent in populations in which peptic ulcer and gastric-cancer have high incidence (Pagliaccia et al., Proc. Natl. Acad. Sci. U.S.A, 1998, 95(17), 10212-10217, *The m2 form of the Helicobacter pylori* cytotoxin has cell type-specific vacuolating activity).

10 CagA is one of the proteins encoded by the "cag pathogenicity island" (Spohn et al. 1997, Molecular Microbiology, 26(2), 361-372, *Transcriptional analysis of the divergent cagAB genes encoded by the pathogenicity island of Helicobacter pylori*) found in *H. pylori* strains isolated from most patients with peptic ulcer disease and adenocarcinoma. CagA is produced by 50-60% of *H.*
15 *pylori* strains; it is a high molecular weight (120-140 kDa) superficial protein and an immunodominant antigen with unknown function. *H. pylori* strains that produce CagA protein have two genes cagB and cagC (36 and 101 kDa proteins, respectively). These genes are highly associated with duodenal ulcers (Blaser et al. 1996, WO 96/12825, *cagB and cagC genes of Helicobacter pylori and related*
20 *methods and compositions*).

Other virulence factors are : several gastric tissue-specific adhesins (Boren et al., 1993, Science, 262, 1892-1895).

Therapeutic agents are currently available that eradicate *H. pylori* infections *in vitro*. However, methods employing antibiotic agents result in the emergence of
25 bacterial strains which are resistant to these agents.

Thus, it is an object of the present invention to identify protein-protein interactions for *Helicobacter pylori*.

It is another object of the present invention to identify protein-protein interactions of *Helicobacter pylori* for the development of more effective and
30 better targeted therapeutic applications.

It is yet another object of the present invention to identify complexes of polypeptides or polynucleotides encoding the polypeptides and fragments of the polypeptides of *Helicobacter pylori*.

5 It is yet another object of the present invention to identify antibodies to these complexes of polypeptides or polynucleotides encoding the polypeptides and fragments of the polypeptides of *Helicobacter pylori* including polyclonal, as well as monoclonal antibodies that are used for detection.

It is still another object of the present invention to identify selected interacting domains of the polypeptides, called SID® polypeptides.

10 It is still another object of the present invention to identify selected interacting domains of the polynucleotides, called SID® polynucleotides.

It is another object of the present invention to generate protein-protein interactions maps called PIM®s.

15 It is yet another object of the present invention to classify genes of *H. pylori* into functional categories at the genomic scale such as genes essential or nonessential for viability.

It is yet another object of the present invention to identify Putative Essential Genes (PEGS) from *H. pylori*, as well as the true essential genes.

20 It is yet another object of the present invention to establish a large scale protein-protein interaction map of *H. pylori* using the two-hybrid system as a way to elucidate the function of yet uncharacterized proteins.

It is yet another object of the present invention to identify a superbinder phenotype in *H. pylori* with the two-hybrid system which completely inhibits specific protein-protein interactions.

25 It is yet another object of the present invention to identify oligopeptides. Their overlapping or combining derivatives that inhibit *H. pylori* growth.

In yet another aspect, the present invention relates to the identification of ORFs (open reading frames) having enzymatic activity, which provides a direct way to screen lead compounds that abolish enzymatic activity through the disruption of the oligomeric interaction.

5 It is yet another object of the present invention to provide a method for screening drugs for agents which modulate the interaction of proteins and pharmaceutical compositions that are capable of modulating the protein-protein interactions of *Helicobacter pylori*.

10 It is another object to administer the nucleic acids of the present invention via gene therapy.

It is yet another object of the present invention to provide protein-chips or protein microarrays.

15 It is yet another object of the present invention to provide a report in, for example paper, electronic and/or digital forms, concerning the protein-protein interactions, the modulating compounds and the like, as well as a PIM®.

These and other objects are achieved by the present invention as evidenced by the summary of the invention, description of the preferred embodiments and the claims.

SUMMARY OF THE PRESENT INVENTION

20 Thus the present invention relates to a protein complex of polypeptides as described in Table 1.

Furthermore, the present invention provides SID® polynucleotides and SID® polypeptides as defined in Figure 2, as well as a PIM® for *Helicobacter pylori*.

25 The present invention also provides antibodies to the protein-protein complexes for *Helicobacter pylori*.

In another embodiment the present invention provides a method for screening drugs for agents that modulate the protein-protein interactions and pharmaceutical compositions that are capable of modulating protein-protein interactions.

5 In another embodiment the present invention provides protein chips or protein microarrays.

In another embodiment the present invention identifies a superbinder phenotype in *H. pylori* with the two-hybrid system which completely inhibits protein-protein interactions.

10 In another aspect the present invention provides oligopeptides, their overlapping or combining derivatives thereof that inhibit *H. pylori* growth.

In yet another embodiment, the present invention identifies ORFs having enzymatic activity which provides a direct way to screen lead compounds.

15 In yet another embodiment the present invention provides a report in, for example, paper, electronic and/or digital forms.

BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is a schematic representation of the pB1 plasmid.

Fig. 2 is a schematic representation of the pB5 plasmid.

20 Fig. 3 is a schematic representation of the pB6 plasmid.

Fig. 4 is a schematic representation of the pB13 plasmid.

Fig. 5 is a schematic representation of the pB14 plasmid.

Fig. 6 is a schematic representation of the pB20 plasmid.

Fig. 7 is a schematic representation of the pP1 plasmid.

25 Fig. 8 is a schematic representation of the pP2 plasmid.

Fig. 9 is a schematic representation of the pP3 plasmid.

Fig. 10 is a schematic representation of the pP6 plasmid.

Fig. 11 is a schematic representation of the pP7 plasmid.

Fig. 12 is a schematic representation of vectors expressing the T25
5 fragment.

Fig. 13 is a schematic representation of vectors expressing the T18
fragment.

Fig. 14 is a schematic representation of various vectors of pCmAHL1,
pT25 and pT18.

Fig. 15 is a schematic representation identifying the SID®'s of
10 *Helicobacter pylori*. In this figure the "Full-length prey protein" is the Open
Reading Frame (ORF) or coding sequence (CDS) where the identified
prey polypeptides are included. The Selected Interaction Domain (SID®) is
determined by the commonly shared polypeptide domain of every selected
15 prey fragment.

Fig. 16 is a protein map (PIM®).

Fig. 17 is a gel illustrating the results obtained for the disruption of the
ORFs *hp0099* to *hp0198*. This figure exemplifies first that multiple
20 insertions of the transposon took place and second that for the majority
transposon insertion occurred at a distance ranging between 100 to 600
bp from the 5'-end of the ORF, a distance compatible with the promotion
of gene replacement by allelic recombination.

Fig. 18 is a schematic diagram of the procedure for classification of the
genes as described in the present invention.

Fig. 19 are the results of three-hybrid experiments. Growth phenotypes of
25 diploid strains containing various plasmids were analyzed by incubating
cells at various dilutions (from 1 to 10^{-4}). Yeast growth was performed

over 2 days at 30°C on DO-3+Met or DO-3-Met medium. Lane 1 are cells
containing [p3H1-HP1230]+pP6-HP1529; Lane 2 [p3H1-HP1230-
SID1529WT]+pP6-HP1529; lane 3[pH1-HP1230-SID1529(N38D-
V53L)+pP6-HP1529; lane 4 [p3H1-HP1230-SID1529(V53L)]+pP6-
5 HP1529; and lane 5 [p3H1-HP1230]+pP6-HP0875.

Fig. 20 is the pP7-centro vector.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

As used herein the terms "polynucleotides", "nucleic acids" and
10 "oligonucleotides" are used interchangeably and include, but are not limited to
RNA, DNA, RNA/DNA sequences of more than one nucleotide in either single
chain or duplex form. The polynucleotide sequences of the present invention may
be prepared from any known method including, but not limited to, any synthetic
method, any recombinant method, any ex vivo generation method and the like, as
15 well as combinations thereof.

The term "polypeptide" means herein a polymer of amino acids having no
specific length. Thus, peptides, oligopeptides and proteins are included in the
definition of "polypeptide" and these terms are used interchangeably throughout
the specification, as well as in the claims. The term "polypeptide" does not
20 exclude posttranslational modifications such as polypeptides having covalent
attachment of glycosyl groups, acetyl groups, phosphate groups, lipid groups and
the like. Also encompassed by this definition of "polypeptide" are homologs
thereof.

By the term "homologs" is meant structurally similar genes contained
25 within a given species, orthologs are functionally equivalent genes from a given
species or strain, as determined for example, in a standard complementation
assay. Thus, a polypeptide of interest can be used not only as a model for
identifying similar genes in given strains, but also to identify homologs and
orthologs of the polypeptide of interest in other species. The orthologs, for

example, can also be identified in a conventional complementation assay. In addition or alternatively, such orthologs can be expected to exist in bacteria (or other kind of cells) in the same branch of the phylogenic tree, as set forth, for example, at <ftp://ft.cme.msu.edu/pub/rdp/SSU-rRNA/SSU/Prok.phylo>.

5 As used herein the term "prey polynucleotide" means a chimeric polynucleotide encoding a polypeptide comprising (i) a specific domain; and (ii) a polypeptide that is to be tested for interaction with a bait polypeptide. The specific domain is preferably a transcriptional activating domain.

10 As used herein, a "bait polynucleotide" is a chimeric polynucleotide encoding a chimeric polypeptide comprising (i) a complementary domain; and (ii) a polypeptide that is to be tested for interaction with at least one prey polypeptide. The complementary domain is preferably a DNA-binding domain that recognizes a binding site that is further detected and is contained in the host organism.

15 As used herein "complementary domain" is meant a functional constitution of the activity when bait and prey are interacting; for example, enzymatic activity.

As used herein "specific domain" is meant a functional interacting activation domain that may work through different mechanisms by interacting directly or indirectly through intermediary proteins with RNA polymerase II or III-associated proteins in the vicinity of the transcription start site.

20 As used herein the term "complementary" means that, for example, each base of a first polynucleotide is paired with the complementary base of a second polynucleotide whose orientation is reversed. The complementary bases are A and T (or A and U) or C and G.

25 The term "sequence identity" refers to the identity between two peptides or between two nucleic acids. Identity between sequences can be determined by comparing a position in each of the sequences which may be aligned for the purposes of comparison. When a position in the compared sequences is occupied by the same base or amino acid, then the sequences are identical at that position. A degree of sequence identity between nucleic acid sequences is a

function of the number of identical nucleotides at positions shared by these sequences. A degree of identity between amino acid sequences is a function of the number of identical amino acid sequences that are shared between these sequences. Since two polypeptides may each (i) comprise a sequence (i.e., a
5 portion of a complete polynucleotide sequence) that is similar between two polynucleotides, and (ii) may further comprise a sequence that is divergent between two polynucleotides, sequence identity comparisons between two or more polynucleotides over a "comparison window" refers to the conceptual segment of at least 20 contiguous nucleotide positions wherein a polynucleotide
10 sequence may be compared to a reference nucleotide sequence of at least 20 contiguous nucleotides and wherein the portion of the polynucleotide sequence in the comparison window may comprise additions or deletions (i.e., gaps) of 20 percent or less compared to the reference sequence (which does not comprise additions or deletions) for optimal alignment of the two sequences.

15 To determine the percent identity of two amino acids sequences or two nucleic acid sequences, the sequences are aligned for optimal comparison. For example, gaps can be introduced in the sequence of a first amino acid sequence or a first nucleic acid sequence for optimal alignment with the second amino acid sequence or second nucleic acid sequence. The amino acid residues or
20 nucleotides at corresponding amino acid positions or nucleotide positions are then compared. When a position in the first sequence is occupied by the same amino acid residue or nucleotide as the corresponding position in the second sequence, the molecules are identical at that position.

The percent identity between the two sequences is a function of the
25 number of identical positions shared by the sequences. Hence % identity = number of identical positions / total number of overlapping positions X 100.

In this comparison the sequences can be the same length or may be different in length. Optimal alignment of sequences for determining a comparison window may be conducted by the local homology algorithm of Smith and
30 Waterman (*J. Theor. Biol.*, 91 (2) pgs. 370-380 (1981)), by the homology alignment algorithm of Needleman and Wunsch, *J. Mol. Biol.*, 48(3) pgs. 443-453

(1972), by the search for similarity via the method of Pearson and Lipman, PNAS, USA, 85(5) pgs. 2444-2448 (1988), by computerized implementations of these algorithms (GAP, BESTFIT, FASTA and TFASTA in the Wisconsin Genetics Software Package Release 7.0, Genetic Computer Group, 575, Science Drive, Madison, Wisconsin) or by inspection.

The best alignment (i.e., resulting in the highest percentage of identity over the comparison window) generated by the various methods is selected.

The term "sequence identity" means that two polynucleotide sequences are identical (i.e., on a nucleotide by nucleotide basis) over the window of comparison. The term "percentage of sequence identity" is calculated by comparing two optimally aligned sequences over the window of comparison, determining the number of positions at which the identical nucleic acid base (e.g., A, T, C, G, U, or I) occurs in both sequences to yield the number of matched positions, dividing the number of matched positions by the total number of positions in the window of comparison (i.e., the window size) and multiplying the result by 100 to yield the percentage of sequence identity. The same process can be applied to polypeptide sequences.

The percentage of sequence identity of a nucleic acid sequence or an amino acid sequence can also be calculated using BLAST software (Version 2.06 of September 1998) with the default or user defined parameter.

The term "sequence similarity" means that amino acids can be modified while retaining the same function. It is known that amino acids are classified according to the nature of their side groups and some amino acids such as the basic amino acids can be interchanged for one another while their basic function is maintained.

The term "isolated" as used herein means that a biological material such as a nucleic acid or protein has been removed from its original environment in which it is naturally present. For example, a polynucleotide present in a plant, mammal or animal is present in its natural state and is not considered to be isolated. The same polynucleotide separated from the adjacent nucleic acid

sequences in which it is naturally inserted in the genome of the plant or animal is considered as being "isolated."

The term "isolated" is not meant to exclude artificial or synthetic mixtures with other compounds, or the presence of impurities which do not interfere with the biological activity and which may be present, for example, due to incomplete
5 purification, addition of stabilizers or mixtures with pharmaceutically acceptable excipients and the like.

"Isolated polypeptide" or "isolated protein" as used herein means a polypeptide or protein which is substantially free of those compounds that are
10 normally associated with the polypeptide or protein in a naturally state such as other proteins or polypeptides, nucleic acids, carbohydrates, lipids and the like.

The term "purified" as used herein means at least one order of magnitude of purification is achieved, preferably two or three orders of magnitude, most preferably four or five orders of magnitude of purification of the starting material
15 or of the natural material. Thus, the term "purified" as utilized herein does not mean that the material is 100% purified and thus excludes any other material.

The term "variants" when referring to, for example, polynucleotides encoding a polypeptide variant of a given reference polypeptide are polynucleotides that differ from the reference polypeptide but generally maintain
20 their functional characteristics of the reference polypeptide. A variant of a polynucleotide may be a naturally occurring allelic variant or it may be a variant that is known naturally not to occur. Such non-naturally occurring variants of the reference polynucleotide can be made by, for example, mutagenesis techniques, including those mutagenesis techniques that are applied to polynucleotides, cells
25 or organisms.

Generally, differences are limited so that the nucleotide sequences of the reference and variant are closely similar overall and, in many regions identical.

Variants of polynucleotides according to the present invention include, but are not limited to, nucleotide sequences which are at least 95% identical after

alignment to the reference polynucleotide encoding the reference polypeptide. These variants can also have 96%, 97%, 98% and 99.999% sequence identity to the reference polynucleotide.

5 Nucleotide changes present in a variant polynucleotide may be silent, which means that these changes do not alter the amino acid sequences encoded by the reference polynucleotide.

Substitutions, additions and/or deletions can involve one or more nucleic acids. Alterations can produce conservative or non-conservative amino acid substitutions, deletions and/or additions.

10 Variants of a prey or a SID® polypeptide encoded by a variant polynucleotide can possess a higher affinity of binding and/or a higher specificity of binding to its protein or polypeptide counterpart, against which it has been initially selected. In another context, variants can also lose their ability to bind to their protein or polypeptide counterpart.

15 By "anabolic pathway" is meant a reaction or series of reactions in a metabolic pathway that synthesize complex molecules from simpler ones, usually requiring the input of energy. An anabolic pathway is the opposite of a catabolic pathway.

20 As used herein, a "catabolic pathway" is a series of reactions in a metabolic pathway that break down complex compounds into simpler ones, usually releasing energy in the process. A catabolic pathway is the opposite of an anabolic pathway.

25 As used herein, "drug metabolism" is meant the study of how drugs are processed and broken down by the body. Drug metabolism can involve the study of enzymes that break down drugs, the study of how different drugs interact within the body and how diet and other ingested compounds affect the way the body processes drugs.

As used herein, "metabolism" means the sum of all of the enzyme-catalyzed reactions in living cells that transform organic molecules.

By "secondary metabolism" is meant pathways producing specialized metabolic products that are not found in every cell.

As used herein, "SID®" means a Selected Interacting Domain and is identified as follows: for each bait polypeptide screened, selected prey polypeptides are compared. Overlapping fragments in the same ORF or CDS define the selected interacting domain.

As used herein the term "PIM®" means a protein-protein interaction map. This map is obtained from data acquired from a number of separate screens using different bait polypeptides and is designed to map out all of the interactions between the polypeptides.

The term "affinity of binding", as used herein, can be defined as the affinity constant K_a when a given SID® polypeptide of the present invention which binds to a polypeptide and is the following mathematical relationship:

$$K_a = \frac{[\text{SID® / polypeptide complex}]}{[\text{free SID®}] [\text{free polypeptide}]}$$

wherein [free SID®], [free polypeptide] and [SID® polypeptide complex] consist of the concentrations at equilibrium respectively of the free SID® polypeptide, of the free polypeptide onto which the SID® polypeptide binds and of the complex formed between SID® polypeptide and the polypeptide onto which said SID® polypeptide specifically binds.

The affinity of a SID® polypeptide of the present invention or a variant thereof for its polypeptide counterpart can be assessed for example, on a Biacore™ apparatus marketed by Amersham Pharmacia Biotech Company such as described by Szabo et al *Curr Opin Struct Biol* 5 pgs. 699-705 (1995) and by Edwards and Leartherbarrow, *Anal. Biochem* 246 pgs. 1-6 (1997).

As used herein the phrase "at least the same affinity" with respect to the binding affinity between a SiD® polypeptide of the present invention to another polypeptide means that the K_a is identical or can be at least two-fold, at least three fold or at least five fold greater than the K_a value of reference.

5 As used herein, the term "modulating compound" means a compound that inhibits or stimulates or can act on another protein which can inhibit or stimulate the protein-protein interaction of a complex of two polypeptides or the protein-protein interaction of two polypeptides.

10 More specifically, the present invention comprises complexes of polypeptides or polynucleotides encoding the polypeptides composed of a bait polypeptide, or a bait polynucleotide encoding a bait polypeptide and a prey polypeptide or a prey polynucleotide encoding a prey polypeptide. The prey polypeptide or prey polynucleotide encoding the prey polypeptide is capable of interacting with a bait polypeptide of interest in various hybrid systems.

15 As described in the Background of the present invention there are various methods known in the art to identify prey polypeptides that interact with bait polypeptides of interest. These methods, include, but are not limited to, generic two- hybrid systems as described by Fields et al in *Nature*, 340:245-246 (1989) and more specifically in U.S. Patent Nos. 5,283,173, 5,468,614 and 5,667,973, 20 which are hereby incorporated by reference; the reverse two-hybrid system described by Vidal et al, *supra*; the two plus one hybrid method described, for example, in Tirode et al, *supra*; the yeast forward and reverse 'n'-hybrid systems as described in Vidal and Legrain, *supra*; the method described in WO 99/42612; those methods described in Legrain et al *FEBS Letters* 480 pgs. 32-36 (2000) 25 and the like.

The present invention is not limited to the type of method utilized to detect protein-protein interactions and therefore any method known in the art and variants thereof can be used. It is however better to use the method described in WO 99/42612 or WO 00/66722, both references incorporated herein by 30 reference due to the methods' sensitivity, reproducibility and reliability.

Protein-protein interactions can also be detected using complementation assays such as those described by Pelletier et al at <http://www.abrf.org/JBT/Articles/JBT0012/jbt0012.html>, WO 00/07038 and W098/34120.

5 Although the above methods are described for applications in the yeast system, the present invention is not limited to detecting protein-protein interactions using yeast, but also includes similar methods that can be used in detecting protein protein interactions in, for example, mammalian systems as described, for example in Takacs et al., Proc. Nat. Acad. Sci., USA, 90
10 (21):10375 (1993) and Vasavada et al., Proc. Nat. Acad. Sci., USA, 88 (23):10686-90 (1991), as well as a bacterial two-hybrid system as described in Karimov et al (1998), W099/28746, WO 00/66722 and Legrain et al *FEBS Letters*, 480 pgs. 32-36 (2001).

The above-described methods are limited to the use of yeast, mammalian
15 cells and *Escherichia coli* cells, however the present invention is not limited in this manner. Consequently, mammalian and typically human cells, as well as bacterial, yeast, fungus, insect, nematode and plant cells are encompassed by the present invention and may be transfected by the nucleic acid or recombinant vector as defined herein.

20 Examples of suitable cells include, but are not limited to, VERO cells, HELA cells such as ATCC No. CCL2, CHO cell lines such as ATCC No. CCL61, COS cells such as COS-7 cells and ATCC No. CRL 1650 cells, W138, BHK, HepG2, 3T3 such as ATCC No. CRL6361, A549, PC12, K562 cells, 293 cells, Sf9 cells such as ATCC No. CRL1711 and Cv1 cells such as ATCC No. CCL70.

25 Other suitable cells that can be used in the present invention include, but are not limited to, prokaryotic host cells strains such as *Escherichia coli*, (e.g., strain DH5- α , *Bacillus subtilis*, *Salmonella typhimurium*, or strains of the genera of *Pseudomonas*, *Streptomyces* and *Staphylococcus*.

Further suitable cells that can be used in the present invention include
30 yeast cells such as those of *Saccharomyces* such as *Saccharomyces cerevisiae*.

The bait polynucleotide, as well as the prey polynucleotide can be prepared according to the methods known in the art such as those described above in the publications and patents reciting the known method *per se*.

5 The bait polynucleotide of the present invention is obtained from genomic DNA of *Helicobacter pylori*. The prey polynucleotide is obtained from genomic DNA of *Helicobacter pylori*, variants of genomic DNA of *Helicobacter pylori*, and fragments from the genome or transcriptome of *Helicobacter pylori* ranging from about 20 to 5000. The prey polynucleotide is then selected, sequenced and identified.

10 A genomic DNA prey library is prepared from the *Helicobacter pylori* and constructed in the specially designed prey vector pP6 as shown in Figure 10 after ligation of suitable linkers such that every genomic DNA insert is fused to a nucleotide sequence in the vector that encodes the transcription activation domain of a reporter gene. Any transcription activation domain can be used in the present invention. Examples include, but are not limited to, Gal4, YP16, B42, His
15 and the like.

Toxic reporter genes, such as CAT^R, CYH2, CYH1, URA3, bacterial and fungi toxins and the like can be used in reverse two-hybrid systems.

20 The polypeptides encoded by the nucleotide inserts of the genomic DNA prey library thus prepared are termed "prey polypeptides in the context of the presently described selection method of the prey polynucleotides.

The bait polynucleotide can be inserted in bait plasmid as illustrated in Figure 1. The bait polynucleotide insert is fused to a polynucleotide encoding the binding domain of, for example, the Gal4 DNA binding domain and the shuttle
25 expression vector is used to transform cells.

As stated above, any cells can be utilized in transforming the bait and prey polynucleotides of the present invention including mammalian cells, bacterial cells, yeast cells, insect cells and the like.

in an embodiment, the present invention identifies protein-protein interactions in yeast. In using known methods a prey positive clone is identified containing a vector which comprises a nucleic acid insert encoding a prey polypeptide which binds to a bait polypeptide of interest. The method in which
5 protein-protein interactions are identified comprises the following steps:

- i) mating at least one first haploid recombinant yeast cell clone from a recombinant yeast cell clone library that has been transformed with a plasmid containing the prey polynucleotide to be assayed with a second haploid recombinant yeast cell clone transformed with a plasmid containing a bait polynucleotide encoding for the bait polypeptide;
10
- ii) cultivating diploid cell clones obtained in step i) on a selective medium; and
- iii) selecting recombinant cell clones which grow on the selective medium.
15

This method may further comprise the step of:

- iv) characterizing the prey polynucleotide contained in each recombinant cell clone which is selected in step iii).

In yet another embodiment of the present invention, *in lieu* of yeast,
20 *Escherichia coli* is used in a bacterial two-hybrid system, which encompasses a similar principle to that described above for yeast, but does not involve mating for characterizing the prey polynucleotide.

In yet another embodiment of the present invention, mammalian cells and a method similar to that described above for yeast for characterizing the prey
25 polynucleotide are used.

By performing the yeast, bacterial or mammalian two-hybrid system it is possible to identify for one particular bait an interacting prey polypeptide. The prey polypeptide that has been selected by testing the library of preys in a screen

using the two-hybrid, two plus one hybrid methods and the like, encodes the polypeptide interacting with the protein of interest.

The present invention is also directed, in a general aspect, to a complex of polypeptides, polynucleotides encoding the polypeptides composed of a bait polypeptide or bait polynucleotide encoding the bait polypeptide and a prey polypeptide or prey polynucleotide encoding the prey polypeptide capable of interacting with the bait polypeptide of interest. These complexes are identified in Table 1, as the bait amino acid sequences and the prey amino acid sequences, as well as the bait and prey nucleic acid sequences.

In another aspect, the present invention relates to a complex of polynucleotides consisting of a first polynucleotide, or a fragment thereof, encoding a prey polypeptide that interacts with a bait polypeptide and a second polynucleotide or a fragment thereof. This fragment has at least 20 consecutive nucleotides, but can have between 20 and 5,000 consecutive nucleotides, or between 12 and 10,000 consecutive nucleotides or between 12 and 20,000 consecutive nucleotides.

The polypeptides of column 3 encoded by the polynucleotides of column 2 in Tables 2 and 7 and the polypeptides of column 5 encoded by the polynucleotides of column 3 in Table 8 according to the present invention and the complexes of the two polypeptides encoded by the sets of two polynucleotides also form part of the present invention. In yet another embodiment, the present invention relates to an isolated complex of at least two polypeptides encoded by two polynucleotides wherein said two polypeptides are associated in the complex by affinity binding and are depicted in Table 1 and Table 8.

In yet another embodiment, the present invention relates to an isolated complex comprising at least a polypeptide encoded by an ORF (HP####) of column 1 of Table 1 and a polypeptide encoded by an ORF (HP####) of column 2 of Table 1 and Table 8. The present invention is not limited to these polypeptide complexes alone but also includes the isolated complex of the two polypeptides

in which fragments and/or homologous polypeptides exhibiting at least 95% sequence identity, as well as from 96% sequence identity to 99.999% sequence identity.

Also encompassed in another embodiment of the present invention is an isolated complex in which the SID® polypeptide (see even SEQ ID Nos. from 2 to 3256 in column 3 of Table 2, even SEQ ID Nos. 6590 to 6594 in Table 7 and even SEQ ID Nos. 6596 to 6644 in Table 8.) of the prey polypeptides encoded by uneven SEQ ID Nos. 1 to 3255 in column 2 of Table 2, uneven SEQ ID Nos. 6589 to 6593 in Table 7 and uneven SEQ ID Nos. 6595 to 6643 in Table 8) forming the isolated complex.

Besides the isolated complexes described above, nucleic acids coding for a Selected Interacting Domain (SID®) polypeptide or a variant thereof or any of the nucleic acids set forth in Tables 2, 7 and 8 can be inserted into an expression vector which contains the necessary elements for the transcription and translation of the inserted protein-coding sequence. Such transcription elements include a regulatory region and a promoter. Thus, the nucleic acid which may encode a marker compound of the present invention is operably linked to a promoter in the expression vector. The expression vector may also include a replication origin.

A wide variety of host/expression vector combinations are employed in expressing the nucleic acids of the present invention. Useful expression vectors that can be used include, for example, segments of chromosomal, non-chromosomal and synthetic DNA sequences. Suitable vectors include, but are not limited to, derivatives of SV40 and pcDNA and known bacterial plasmids such as col EI, pCR1, pBR322, pMal-C2, pET, pGEX as described by Smith et al (1988), pMB9 and derivatives thereof, plasmids such as RP4, phage DNAs such as the numerous derivatives of phage I such as NM989, as well as other phage DNA such as M13 and filamentous single stranded phage DNA; yeast plasmids such as the 2 micron plasmid or derivatives of the 2 micron plasmid, as well as centomeric and integrative yeast shuttle vectors; vectors useful in eukaryotic cells such as vectors useful in insect or mammalian cells; vectors derived from

combinations of plasmids and phage DNAs, such as plasmids that have been modified to employ phage DNA or the expression control sequences and the like.

For example in a baculovirus expression system, both non-fusion transfer vectors, such as, but not limited to pVL941 (*Bam*HI cloning site Summers, 5 pVL1393 (*Bam*HI, *Sma*I, *Xba*I, *Eco*RI, *Not*I, *Xma*III, *Bgl*II and *Pst*I cloning sites; Invitrogen) pVL1392 (*Bgl*II, *Pst*I, *Not*I, *Xma*III, *Eco*RI, *Xba*I, *Sma*I and *Bam*HI cloning sites; Summers and Invitrogen) and pBlueBacIII (*Bam*HI, *Bgl*II, *Pst*I, *Nco*I and *Hind*III cloning sites, with blue/white recombinant screening, Invitrogen), and fusion transfer vectors such as, but not limited to, pAc700 (*Bam*HI and *Kpn*I 10 cloning sites, in which the *Bam*HI recognition site begins with the initiation codon; Summers), pAc701 and pAc70-2 (same as pAc700, with different reading frames), pAc360 (*Bam*HI cloning site 36 base pairs downstream of a polyhedrin initiation codon; Invitrogen (195)) and pBlueBacHisA, B, C (three different reading frames with *Bam*HI, *Bgl*II, *Pst*I, *Nco*I and *Hind*III cloning site, an N-terminal 15 peptide for ProBond purification and blue/white recombinant screening of plaques; Invitrogen (220) can be used.

Mammalian expression vectors contemplated for use in the invention include vectors with inducible promoters, such as the dihydrofolate reductase promoters, any expression vector with a DHFR expression cassette or a 20 DHFR/methotrexate co- amplification vector such as pED (*Pst*I, *Sal*I, *Sba*I, *Sma*I and *Eco*RI cloning sites, with the vector expressing both the cloned gene and DHFR; Kaufman, 1991). Alternatively a glutamine synthetase/methionine sulfoximine co-amplification vector, such as pEE14 (*Hind*III, *Xba*I, *Sma*I, *Sba*I, *Eco*RI and *Bcl*I cloning sites in which the vector expresses glutamine synthetase 25 and the cloned gene; Celltech). A vector that directs episomal expression under the control of the Epstein Barr Virus (EBV) or nuclear antigen (EBNA) can be used such as pREP4 (*Bam*HI, *Sfi*I, *Xho*I, *Not*I, *Nhe*I, *Hind*III, *Nhe*I, *Pvu*II and *Kpn*I cloning sites, constitutive RSV-LTR promoter, hygromycin selectable marker; Invitrogen) pCEP4 (*Bam*HI, *Sfi*I, *Xho*I, *Nod*I, *Nhe*I, *Hind*III, *Nhe*I, *Pvu*II 30 and *Kpn*I cloning sites, constitutive hCMV immediate early gene promoter, hygromycin selectable marker; Invitrogen), pMEP4 (*Kpn*I, *Pvu*I, *Nhe*I, *Hind*III,

NotI, *XhoI*, *SfiI*, *BamHI* cloning sites, inducible methallothionein Ila gene promoter, hygromycin selectable marker, Invitrogen), pREP8 (*BamHI*, *XhoI*, *NotI*, *HindIII*, *NheI* and *KpnI* cloning sites, RSV-LTR promoter, histidinol selectable marker; Invitrogen), pREP9 (*KpnI*, *NheI*, *HindIII*, *NotI*, *XhoI*, *SfiI*, *BamHI* cloning sites, RSV-LTR promoter, G418 selectable marker; Invitrogen), and pEBVHis (RSV-LTR promoter, hygromycin selectable marker, N-terminal peptide purifiable via ProBond resin and cleaved by enterokinase; Invitrogen).

Selectable mammalian expression vectors for use in the invention include, but are not limited to, pRc/CMV (*HindIII*, *BstXI*, *NotI*, *SbaI* and *ApaI* cloning sites, G418 selection, Invitrogen), pRc/RSV (*HindII*, *SpeI*, *BstXI*, *NotI*, *XbaI* cloning sites, G418 selection, Invitrogen) and the like. Vaccinia virus mammalian expression vectors (see, for example Kaufman 1991) that can be used in the present invention include, but are not limited to, pSC11 (*SmaI* cloning site, TK- and β -gal selection), pMJ601 (*SaII*, *SmaI*, *AflI*, *NarI*, *BspMII*, *BamHI*, *ApaI*, *NheI*, *SacII*, *KpnI* and *HindIII* cloning sites; TK- and β -gal selection), pTKgptF1S (*EcoRI*, *PstI*, *SaII*, *AccI*, *HindII*, *SbaI*, *BamHI* and *HpaI* cloning sites, TK or XPRT selection) and the like.

Yeast expression systems that can also be used in the present invention include, but are not limited to, the non-fusion pYES2 vector (*XbaI*, *SphI*, *ShoI*, *NotI*, *GstXI*, *EcoRI*, *BstXI*, *BamHI*, *SacI*, *KpnI* and *HindIII* cloning sites, Invitrogen), the fusion pYESHisA, B, C (*XbaI*, *SphI*, *ShoI*, *NotI*, *BstXI*, *EcoRI*, *BamHI*, *SacI*, *KpnI* and *HindIII* cloning sites, N-terminal peptide purified with ProBond resin and cleaved with enterokinase; Invitrogen), pRS vectors and the like.

Consequently, mammalian and typically human cells, as well as bacterial, yeast, fungi, insect, nematode and plant cells are used in the present invention and may be transfected by the nucleic acid or recombinant vector as defined herein.

Examples of suitable cells include, but are not limited to, VERO cells, HELA cells such as ATCC No. CCL2, CHO cell lines such as ATCC No. CCL61,

COS cells such as COS-7 cells and ATCC No. CRL 1650 cells, W138, BHK, HepG2, 3T3 such as ATCC No. CRL6361, A549, PC12, K562 cells, 293 cells, Sf9 cells such as ATCC No. CRL1711 and Cv1 cells such as ATCC No. CCL70.

Other suitable cells that can be used in the present invention include, but are not limited to, prokaryotic host cells strains such as *Escherichia coli*, (e.g., strain DH5- α), *Bacillus subtilis*, *Salmonella typhimurium*, or strains of the genera of *Pseudomonas*, *Streptomyces* and *Staphylococcus*.

Further suitable cells that can be used in the present invention include yeast cells such as those of *Saccharomyces* such as *Saccharomyces cerevisiae*.

Besides the specific isolated complexes, as described above, the present invention relates to and also encompasses SID® polynucleotides. As explained above, for each bait polypeptide, several prey polypeptides may be identified by comparing and selecting the intersection of every isolated fragment that are included in the same polypeptide, as set forth, in Example 5. Thus the SID® polynucleotides of the present invention are represented by the nucleic acid sequences of uneven SEQ ID Nos. 1 to 3255 in column 2 of Table 2, uneven SEQ ID Nos. 6589 to 6593 in Table 7 and uneven SEQ ID Nos. 6595 to 6643 in Table 8 encoding the SID® polypeptides of even SEQ ID Nos. 2 to 3256. of Table 2, the even SEQ ID Nos. 6590 to 6594 in Table 7 and the even SEQ ID Nos. 6596 to 6644 in Table 8.

The present invention is not limited to the SID® nucleic acid sequences as described in the above paragraph, but also includes fragments of these sequences having at least 6 consecutive nucleic acids, between 6 and 5,000 consecutive nucleic acids and between 6 and 10,000 consecutive nucleic acids and between 6 and 20,000 consecutive nucleic acids, as well as variants thereof. The fragments or variants of the SID® sequences possess at least the same affinity of binding to its protein or polypeptide counterpart, against which it has been initially selected. Moreover this variant and/or fragments of the SID® sequences alternatively can have between 95% and 99.999% sequence identity to its protein or polypeptide counterpart.

According to the present invention the variants can be created by known mutagenesis techniques either *in vitro* or *in vivo*. Such a variant can be created such that it has altered binding characteristics with respect to the target protein and more specifically that the variant binds the target sequence with either higher
5 or lower affinity.

Polynucleotides that are complementary to the above sequences which include the polynucleotides of the SID®'s, their fragments, variants and those that have specific sequence identity are also included in the present invention.

The polynucleotide encoding the SID® polypeptide, fragment or variant
10 thereof can also be inserted into recombinant vectors which are described in detail above.

The present invention also relates to a composition comprising the above-mentioned recombinant vectors containing the SID® polypeptides in Tables 2, 7 and 8, fragments or variants thereof, as well as recombinant host cells
15 transformed by the vectors. The recombinant host cells that can be used in the present invention were discussed in greater detail above.

The compositions comprising the recombinant vectors can contain physiological acceptable carriers such as diluents, adjuvants, excipients and any vehicle in which this composition can be delivered therapeutically and can
20 include, but are not limited to sterile liquids such as water and oils.

In yet another embodiment, the present invention relates to a method of selecting modulating compounds, as well as the modulating molecules or compounds themselves which may be used in a pharmaceutical composition. These modulating compounds may act as a cofactor, as an inhibitor, as
25 antibodies, as tags, as a competitive inhibitor, as an activator or alternatively have agonistic or antagonistic activity on the protein-protein interactions.

The activity of the modulating compound does not necessarily, for example, have to be 100% activation or inhibition. Indeed, even partial activation or inhibition can be achieved that is of pharmaceutical interest.

The modulating compound can be selected according to a method which comprises:

- 5 (a) cultivating a recombinant host cell with a modulating compound on a selective medium and a reporter gene the expression of which is toxic for said recombinant host cell wherein said recombinant host cell is transformed with two vectors:
 - (i) wherein said first vector comprises a polynucleotide encoding a first hybrid polypeptide having a DNA binding domain;
 - 10 (ii) wherein said second vector comprises a polynucleotide encoding a second hybrid polypeptide having a transcriptional activating domain that activates said toxic reporter gene when the first and second hybrid polypeptides interact;
- 15 (b) selecting said modulating compound which inhibits or permits the growth of said recombinant host cell.

Thus, the present invention relates to a modulating compound that inhibits the protein-protein interactions of a complex of two polypeptides of Table 1 and Table 8. The present invention also relates to a modulating compound that activates the protein-protein interactions of a complex of two polypeptides of
20 Table 1 and Table 8.

In yet another embodiment, the present invention relates to a method of selecting a modulating compound, which modulating compound inhibits the interactions of two polypeptides of Table 1. This method comprises:

- 25 (a) cultivating a recombinant host cell with a modulating compound on a selective medium and a reporter gene the expression of which is toxic for said recombinant host cell wherein said recombinant host cell is transformed with two vectors:

(i) wherein said first vector comprises a polynucleotide encoding a first hybrid polypeptide having a first domain of an enzyme;

(ii) wherein said second vector comprises a polynucleotide encoding a second hybrid polypeptide having an enzymatic transcriptional activating domain that activates said toxic reporter gene when the first and second hybrid polypeptides interact;

(b) selecting said modulating compound which inhibits or permits the growth of said recombinant host cell.

In the two methods described above any toxic reporter gene can be utilized including those reporter genes that can be used for negative selection including the URA3 gene, the CYH1 gene, the CYH2 gene and the like.

In yet another embodiment, the present invention provides a kit for screening a modulating compound. This kit comprises a recombinant host cell which comprises a reporter gene the expression of which is toxic for the recombinant host cell. The host cell is transformed with two vectors. The first vector comprises a polynucleotide encoding a first hybrid polypeptide having a DNA binding domain; and a second vector comprises a polynucleotide encoding a second hybrid polypeptide having a transcriptional activating domain that activates said toxic reporter gene when the first and second hybrid polypeptides interact.

In yet another embodiment a kit is provided for screening a modulating compound by providing a recombinant host cell, as described in the paragraph above, but instead of a DNA binding domain, the first vector comprises a first hybrid polypeptide containing a first domain of a protein. The second vector comprises a second polypeptide containing a second part of a complementary domain of a protein that activates the toxic reporter gene when the first and second hybrid polypeptides interact.

In the selection methods described above, the activating domain can be p42 Gal 4, YP16 (HSV) and the DNA-binding domain can be derived from Gal4 or Lex

A. The protein or enzyme can be adenylate cyclase, guanylate cyclase, DHFR and the like.

SID® in Tables 2, 7 and 8 may be used as modulating compounds.

In yet another embodiment, the present invention relates to a pharmaceutical composition comprising the modulating compounds for preventing or treating ulcers in a human or animal, most preferably in a mammal.

This pharmaceutical composition comprises a pharmaceutically acceptable amount of the modulating compound. The pharmaceutically acceptable amount can be estimated from cell culture assays. For example, a dose can be formulated in animal models to achieve a circulating concentration range that includes or encompasses a concentration point or range having the desired effect in an *in vitro* system. This information can thus be used to accurately determine the doses in other mammals, including humans and animals.

The therapeutically effective dose refers to that amount of the compound that results in amelioration of symptoms in a patient. Toxicity and therapeutic efficacy of such compounds can be determined by standard pharmaceutical procedures in cell cultures or in experimental animals. For example, the LD50 (the dose lethal to 50% of the population) as well as the ED50 (the dose therapeutically effective in 50% of the population) can be determined using methods known in the art. The dose ratio between toxic and therapeutic effects is the therapeutic index which can be expressed as the ratio between LD50 and ED50 compounds that exhibit high therapeutic indexes.

The data obtained from the cell culture and animal studies can be used in formulating a range of dosage of such compounds which lies preferably within a range of circulating concentrations that include the ED50 with little or no toxicity.

The pharmaceutical composition can be administered via any route such as locally, orally, systemically, intravenously, intramuscularly, mucosally, using a patch and can be encapsulated in liposomes, microparticles, microcapsules, and

the like. The pharmaceutical composition can be embedded in liposomes or even encapsulated.

Any pharmaceutically acceptable carrier or adjuvant can be used in the pharmaceutical composition. The modulating compound will be preferably in a soluble form combined with a pharmaceutically acceptable carrier. The techniques for formulating and administering these compounds can be found in *"Remington's Pharmaceutical Sciences"* Mack Publication Co., Easton, PA, latest edition.

The mode of administration optimum dosages and galenic forms can be determined by the criteria known in the art taken into account the seriousness of the general condition of the mammal, the tolerance of the treatment and the side effects.

The present invention also relates to a method of treating or preventing ulcers in a human or mammal in need of such treatment. This method comprises administering to a mammal in need of such treatment a pharmaceutically effective amount of a modulating compound which binds to a targeted bacterial protein. In a preferred embodiment, the modulating compound is a polynucleotide which may be placed under the control of a regulatory sequence which is functional in the mammal or human.

In yet another embodiment, the present invention relates to a pharmaceutical composition comprising a SID® polypeptide, a fragment or variant thereof. The SID® polypeptide, fragment or variant thereof can be used in a pharmaceutical composition provided that it is endowed with highly specific binding properties to a bait polypeptide of interest.

The original properties of the SID® polypeptide or variants thereof interfere with the naturally occurring interaction between a first protein and a second protein within the cells of the organism. Thus, the SID® polypeptide binds specifically to either the first polypeptide or the second polypeptide.

Therefore, the SID® polypeptides of the present invention or variants thereof interfere with protein-protein interactions of *Helicobacter pylori* proteins or between *Helicobacter pylori* proteins and mammal, for example, human proteins.

Thus, the present invention relates to a pharmaceutical composition comprising a pharmaceutically acceptable amount of a SID® polypeptide or variant thereof, provided that the variant has the above-mentioned two characteristics; i.e., that it is endowed with highly specific binding properties to a bait polypeptide of interest and is devoid of biological activity of the naturally occurring protein.

10 In yet another embodiment, the present invention relates to a pharmaceutical composition comprising a pharmaceutically effective amount of a polynucleotide encoding a SID® polypeptide or a variant thereof wherein the polynucleotide is placed under the control of an appropriate regulatory sequence. Appropriate regulatory sequences that are used are polynucleotide sequences derived from promoter elements and the like.

Polynucleotides that can be used in the pharmaceutical composition of the present invention include the nucleotide sequence: of uneven SEQ ID Nos. 1 to 3255 in column 2 of Table 2, uneven SEQ ID Nos. 6589 to 6593 in Table 7 and uneven SEQ ID Nos. 6595 to 6643 in Table 8.

20 Besides the SID® polypeptides and polynucleotides, the pharmaceutical composition of the present invention can also include a recombinant expression vector comprising the polynucleotide encoding the SID® polypeptide, fragment or variant thereof.

The above described pharmaceutical compositions can be administered by any route such as orally, systemically, intravenously, intramuscularly, intradermally, mucosally, encapsulated, using a patch and the like. Any pharmaceutically acceptable carrier or adjuvant can be used in this pharmaceutical composition.

The SID® polypeptides as active ingredients will be preferably in a soluble form combined with a pharmaceutically acceptable carrier. The techniques for formulating and administering these compounds can be found in *"Remington's Pharmaceutical Sciences"* *supra*.

5 The amount of pharmaceutically acceptable SID® polypeptides can be determined as described above for the modulating compounds using cell culture and animal models.

Such compounds can be used in a pharmaceutical composition to treat or prevent ulcer.

10 Thus, the present invention also relates to a method of preventing or treating ulcer in a mammal said method comprising the steps of administering to a mammal in need of such treatment a pharmaceutically effective amount of:

(1) a SID® polypeptide of even SEQ ID Nos. 2 to 3256 in column 3 of Table 2, even SEQ ID Nos. 6590 to 6594 in Table 7 and even SEQ ID Nos. 6596 to 15 6644 in Table 8 or variants thereof which binds to a targeted mammalian or typically human protein; or

(2) or SID® polynucleotide encoding a SID® polypeptide of uneven SEQ ID Nos. 1 to 3255 in column 2 of Table 2, uneven SEQ ID Nos. 6589 to 6593 in Table 7 and uneven SEQ ID Nos. 6595 to 6643 in Table 8 or variants or 20 fragments thereof wherein said polynucleotide is placed under the control of a regulatory sequence which is functional in said mammal; or

(3) a recombinant expression vector comprising a polynucleotide encoding a SID® polypeptide which binds to a bacterial protein.

In another embodiment the present invention nucleic acids comprising a 25 sequence which encodes the SID® proteins of Table 2 Table 7 and Table 8 and/or functional derivatives thereof are administered to modulate complex of Table 1 and Table 8 by way of gene therapy. Any of the methodologies relating to gene therapy available within the art may be

used in the practice of the present invention such as those described by Goldspiel et al *Clin. Pharm.* **12** pgs. 488-505 (1993).

Delivery of the therapeutic nucleic acid into a patient may be direct *in vivo* gene therapy (i.e., the patient is directly exposed to the nucleic acid or nucleic acid containing vector) or indirect *ex vivo* gene therapy (i.e., cells are first
5 transformed with the nucleic acid *in vitro* and then transplanted into the patient).

For example for *in vivo* gene therapy, an expression vector containing the nucleic acid is administered in such a manner that it becomes intracellular; i.e., by infection using a defective or attenuated retroviral or other viral vectors as
10 described, for example in U.S. Patent 4,980,286 or by Robbins et al, *Pharmacol. Ther.*, **80** No. 1 pgs. 35-47 (1998).

The various retroviral vectors that are known in the art are such as those described in Miller et al, *Meth. Enzymol.* **217** pgs. 581-599 (1993) which have been modified to delete those retroviral sequences which are not required for
15 packaging of the viral genome and subsequent integration into host cell DNA. Also adenoviral vectors can be used which are advantageous due to their ability to infect non-dividing cells and such high-capacity adenoviral vectors are described in Kochanek, *Human Gene Therapy*, **10**, pgs. 2451-2459 (1999). Chimeric viral vectors that can be used are those described by Reynolds et al,
20 *Molecular Medicine Today*, pgs. 25 -31 (1999). Hybrid vectors can also be used and are described by Jacoby et al, *Gene Therapy*, **4**, pgs. 1282-1283 (1997).

Direct injection of naked DNA or through the use of microparticle bombardment (e.g., Gene Gun®; Biolistic, Dupont) or by coating it with lipids can also be used in gene therapy. Cell-surface receptor s/transfecting agents or
25 through encapsulation in liposomes, microparticles or microcapsules or by administering the nucleic acid in linkage to a peptide which is known to enter the nucleus or by administering it in linkage to a ligand predisposed to receptor-mediated endocytosis (See, Wu & Wu, *J. Biol. Chem.*, **262** pgs. 4429-4432; (1987)) can be used to target cell types which specifically express the receptors of
30 interest.

In another embodiment a nucleic acid ligand compound may be produced in which the ligand comprises a fusogenic viral peptide designed so as to disrupt endosomes, thus allowing the nucleic acid to avoid subsequent lysosomal degradation. The nucleic acid may be targeted *in vivo* for cell specific endocytosis and expression by targeting a specific receptor such as that described in W092/06180, W093/14188 and WO 93/20221. Alternatively the nucleic acid may be introduced intracellularly and incorporated within the host cell genome for expression by homologous recombination. See, Zijlstra et al, Nature, 342, pgs. 435-428 (1989).

10 In *ex vivo* gene a gene is transferred into cells *in vitro* using tissue culture and the cells are delivered to the patient by various methods such as injecting subcutaneously, application of the cells into a skin graft and the intravenous injection of recombinant blood cells such as hematopoietic stem or progenitor cells.

15 Cells into which a nucleic acid can be introduced for the purposes of gene therapy include, for example, epithelial cells, endothelial cells, keratinocytes, fibroblasts, muscle cells, hepatocytes and blood cells. The blood cells that can be used include, for example, T-lymphocytes, B-lymphocytes, monocytes, macrophages, neutrophils, eosinophils, megakaryocytes, granulocytes, hematopoietic cells or progenitor cells and the like.

20 In yet another embodiment the present invention relates to protein chips or protein microarrays. It is well known in the art that microarrays can contain more than 10,000 spots of a protein that can be robotically deposited on a surface of a glass slide or nylon filter. The proteins attach covalently to the slide surface, yet retain their ability to interact with other proteins or small molecules in solution. In some instances the protein samples can be made to adhere to glass slides by coating the slides with an aldehyde-containing reagent that attaches to primary amines. A process for creating microarrays is described, for example by MacBeath and Schreiber in *Science*, Volume 289, Number 5485, pgs, 1760-1763 (2000) or Service, *Science*, Vol, 289, Number 5485 pg. 1673 (2000). An

apparatus for controlling, dispensing and measuring small quantities of fluid is described, for example, in U.S. Patent No. 6,112,605.

The present invention also provides a record of protein-protein interactions, PIM®'s, SID®'s and any data encompassed in the following Tables. It will be appreciated that this record can be provided in paper or electronic or digital form.

In yet another embodiment, the present invention relates to the classification of *H. pylori* within functional categories such as genes essential or non essential for viability using the general method described in Figure 18. In this regard, two exhaustive libraries of *H. pylori* ORFs were constructed in *E. coli*. The first library contained every *H. pylori* (strain 26695) cloned individually (Library I) while the second one (Library II), contained these ORFs disrupted by a transposable element. These two ordered libraries are valuable tools for a large project of systematic inactivation of every ORF of the *H. pylori* genome. They were used to develop a strategy to search at the genomic scale for genes essential for the viability of the bacterium grown *in vitro*. The inactivation strategy was applied to a series of 138 ORFs that were selected on two different criteria. Ninety six of them were previously shown to encode either proteins involved in protein-protein interaction in the two-hybrid yeast assay (Rain et al, 2001), and 42 encode *H. pylori* specific protein with no known function. The screening procedure led to the identification of 40 Putative Essential Genes (PEGs), of which 15 were shown to be true essential genes. The combination of both essentiality as well as the identification of interacting domains might serve as a direct pathway for the design of active compounds capable of inhibiting protein-protein interactions and possibly bacterial growth was the reasoning used behind this analysis.

Construction and validation of the two ordered libraries

Library I consisted of an individual and ordered (*hp0001* to *hp1590*) bank of every putative ORF according to the information provided on the Webb TIGR site in 1997. Based on the 1590 ORFs identified at that time, 5' and 3'-oligonucleotides were synthesized with the characteristics described in Example 10 and in Table 3. Each ORF was cloned into a pILL570- derivative plasmid, 3.6

kb in length. This derivative plasmid corresponds to pILL570 (Labigne et al, 1992) in which DNA from the *Hind*III site of the polylinker to the *Ava*I site (position 1425 of the pBR322 bone) has been excluded by reverse PCR using pILL570 as a template and 570-1 plus 570-2 as primers (Table 4). Each ORF was cloned in such way that the 5'-end of the gene (including the ATG) was inserted immediately downstream the three transcriptional and translational stops of pILL570 (Labigne et al, 1992) to prevent toxicity of the recombinant proteins in *E. coli*. The library consists of 17 times 96-well plates (plate I.1 to plate XVII.1). The recombinant plasmids were transformed into DH5 α *E. coli* cells harboring the pTCA plasmid, a plasmid that confers resistance to tetracycline, encodes the Tn3 transposase and is immune to Tn3 (Seifert et al, 1986). The presence of the two compatible plasmids pILL570-HP000X plus pTCA was checked by plasmid extraction and gel electrophoresis on individual isolated tetracycline, spectinomycin, kanamycin resistant clones. In addition, using primers 570-3 and 570-4 (corresponding to the boundaries of the cloning site on pILL570- \bullet) the adequation between the size of the cloned PCR product and that of the corresponding ORF was confirmed. Library I consists of all the putative ORFs described on the TIGR Webb site in 1997 with the exclusion of 40 ORFs (*hp01*, 10, 46, 56, 94, 160, 223, 264, 289, 293, 399, 415, 435, 440, 453, 159, 464, 465, 488, 547, 607, 722, 790, 814, 846, 876, 884, 898, 968, 1007, 1069, 1205, 1248, 1304, 1358, 1394, 1452, 1460, 1497, 1511) for which either the initial gene amplification or the final cloning failed.

Library II consists of the random insertion of Tn3-Km into each of the recombinant pILL570- \bullet *hp000X* plasmid. Process of disruption has been designed to generate multiple independent transposon insertions for each cloned ORF. Tn3-Km was shown to preferentially map into the *H. pylori* inserts due to both the intrinsic properties of Tn3 that transposes into AT rich DNA region and the requirement of maintaining intact replicative function and spectinomycin modifying enzyme (*aadA*). The efficiency of the whole procedure was checked for five plates. For those 5 plates, the resulting kanamycin transconjugants of 96 independent cloned ORFs were kept individually and as pools of plasmids. The 96 disrupted recombinant plasmids were extracted together and used as a

template for individual PCR assays using as primers the 38bp-R (Table 4) of the inverted repeats of Tn3 transposon and each of the 5'-end specific oligonucleotide used for the cloning of the ORFs. Figure 17 illustrates the results obtained for the disruption of the ORFs *hp0099* to *hp0198* (Plate II.2). This figure exemplifies first that multiple insertions of the transposon took place, second that for the majority transposon insertion occurred at a distance ranging between 100 to 600 bp from the 5'-end of the ORF, a distance compatible with the promotion of gene replacement by allelic recombination.

Screening of Putative Essential Genes of *H. pylori* within a series of 138 selected ORFs

The ordered library of disrupted *H. pylori* ORFs in *E. coli* was used for the genomic screening of putative essential genes (PEGs), and the screening of a subset of 96 individual selected ORFs of *H. pylori* strain 26695 (Table 5) as genes encoding proteins demonstrating homodimeric or heterodimeric protein-protein interactions [Rain, 2001 #14], and the screening of a subset of 42 ORFs encoding *H. pylori* specific predicted protein with no known function (Table 6). Included in the set of 138 ORFs were ORFs used as controls: ORFs known to be essential [*groES* (*hp0011*); *holB* (*hp1231*), *dnaA* (*hp1529*), or ORFs known to be non-essential for viability *in vitro*: *ureI*, (*hp0071*); *rdxA* (*hp0954*); *ggt* (*hp1118*) representative of various sizes. For the 138 ORFs, individual Tn3-Km disrupted recombinant plasmids were extracted from Library II, and used to transform *H. pylori* strain HAS141 (Janvier et al, 1999). This isolate was chosen for the initial screening due to its high natural transformation competency, two logs above that of the sequenced strain 26695, and its ability to colonize mouse stomach (Janvier et al, 1999). Kanamycin transformants were obtained for all but the *hspA* gene as expected, and 40 of the 138 tested ORFs, namely *hp0061*, 175, 377, 419, 553, 650, 739, 862, 928, 990, 1012, 1014, 1074, 1230, 1245, 1263, 1493 for the first series (Table 5), and *hp0130*, 231, 271, 358, 394, 659, 697, 699, 721, 726, 746, 838, 935, 947, 953, 973, 1023, 1028, 1039, 1053, 1085, 1265, 1568 (Table 6) which thus can be designated as Putative Essential Genes. Due to the presence of the two large terminal inverted repeats (38 bp in size) within Tn3-Km

which quickly reannealed during the amplification procedure, gene amplification of the disrupted allele using the respective 5' and 3' oligonucleotides of a given ORF often led to the production of a PCR product with a size similar to that of the parental allele, and thus was not helpful to confirm gene replacement of the parental by the disrupted allele. Thus, six individual kanamycin resistant transformants obtained for the 78 knock-out (KO) genes were controlled by gene amplification using the 5' and the 3' oligonucleotides of the KO-ORF respectively in pairs with the 38 bp (Table 4) of the inverted repeat of the transposon. Criteria for allelic replacement were that the sum of the size of the two PCR products be identical to that of the KO-ORF. The final identification of the disrupted ORF and of the site of insertion was done by sequencing one of the two PCR products. For ORFs with a size over 700 bp two or three different transposon insertions mapping in the middle of the ORF were commonly observed among the six analysed transformants. For a few ORFs, the 5' and the 3' oligonucleotides initially designed from the sequence of strain 26695, were unable to amplify the chromosome of the HAS141 parental strain due to intrinsic polymorphism. In these cases, the 5' and 3' oligos from ORFn+1 or ORFn-1 together with the 38 bp were used. Unexpectedly, a few kanamycin resistant transformants were obtained for *hp1231* (*holB*), and *hp1529* (*dnaA*). For these genes the insertion transposon mapped at the very 3' end of the genes, in contrast to the other genes where the transposable element mapped at any place but at a minimal distance of 300 bp of either end of the genes. These observations indicate that for some of the genes, known to be essential, the kanamycin resistant gene could be rescued, without allelic replacement, by integration of the whole plasmid via a single crossing-over. To estimate the frequency of this event, 260 preparations of chromosomal DNA from individual (210) or pooled (50) kanamycin resistant *H. pylori* transformants were spotted on nitrocellulose, denatured and hybridized with a probe consisting of the pILL570-• vector. Of 260 DNA preparations tested, chromosomal DNA extracted from individual transformants of the disrupted *hp1231*(*holB*), 1514 (unknown) and 1529 (*dnaA*) as well as some (and not all) of the individual clones of *hp0224* and *hp0822* did hybridize with part of the vector confirming that a single crossing-over took place. These results underlined that

the *Tn3*-Km strategy is a powerful approach to be used as a first screen, at a genomic scale, for the identification of PEGs. The definitive assignment of a non-essential status cannot be done exclusively on the presence of kanamycin transformants, but had to be confirmed and tested for absence of vector DNA within the chromosome of transformants by hybridization.

Essentiality and functional analysis of 15 of the 40 ORFs identified as Putative Essential Genes

According to an in-house definition, PEGs consist of ORFs that did not lead to the isolation of kanamycin transformants following the transformation of the parental isolate HAS141 with a pool of disrupted ORF. However, absence of kanamycin transformants cannot be directly associated with the identification of a true essential gene. Several explanations might account for the lack of knock out kanamycin resistant mutant, such as (i) absence of the specific gene in the tested strain, (ii) polar effect of the transposon on an essential ORF located downstream of the PEG, a property associated with mini*Tn3*-Km (Skouloubris et al, 1998) (iii) experimental failure due to the small size of the ORF and of the bordering sequences required for allelic exchange. Thus, to confirm the essential character of a PEG (i.e., essentiality) additional experiments were achieved. For each of the 40 PEGs identified through the initial screening in strain HAS141 (Tables 5 & 6), the following criteria were used to confirm their essentiality. First, the distribution of the different ORFs of the genome by DNA/DNA hybridizations within clinical isolates to confirm their presence not only in the transformed isolate (HAS141), but also in every clinical isolate tested was studied. Second, a non-polar mutation was introduced into the PEG cloned in *E. coli* following the approach depicted in the Materials and Methods section, performed by reverse PCR from plasmids of Library I. The recombinant plasmids consist, in each case, of the 0.9 kb-Kanamycin promoter-less cassette flanked respectively upstream and downstream with the 300 first and the 300 last nucleotides of the ORF to knock-out. In addition, the cassette carries a ribosome binding site and a start codon (ATG) in phase with the hundred 3'-terminal codons of the KO gene allowing the translation of the end of the gene to overcome any

transcriptional/translational coupling effect. The resulting constructed plasmid was transformed in four different *H. pylori* genetic backgrounds: strains HAS141, N6, X47-2An and the sequenced strain 26695. Taking into account these criteria (Figure 17), the following conclusions were drawn relative to the 40 initially
5 identified PEGs.

Strain HAS141 lacks ORFs *hp0990* and *hp1074*. These absences accounted for the lack of mutant for these two ORFs, whereas the other 38 PEGs were found to be present in each of the 37 tested clinical isolates (Salama et al, 2000) and manuscript in preparation). The fact that no HAS141 clones resistant to
10 kanamycin were obtained when transformed with the derivative plasmids containing the disrupted *hp0990* and *hp1074* ORFs confirmed that in the absence of portable homologous region integration of the plasmid does not occur. These two ORFs were not studied further since a non ubiquitous ORF has low probability to be essential and even if so, would not be a good candidate for *H.*
15 *pylori* specific therapeutical drug design.

Non polar kanamycin mutants were unambiguously obtained in HAS141, N6, X47-2An as well as 26695 for ORFs *hp0061*, 419, 553, 650, 1263, and 1493 of the first series of genes encoding interacting protein (Table 5), and *hp0130*, 271, 358, 697, 699, 721, 726, 746, 838, 935, 947, 953, 973, 1023, 1028, 1039, 1053
20 (Table 6). Gene replacement of the parental allele by the deleted and disrupted allele was confirmed by testing the chromosome of the mutant for the disappearance of a PCR product with a size identical to that of the parental ORF and its replacement by the expected size (1.5 kb PCR product: 300 + 900 + 300 bp). When by chance, the parental ORF had a size ranging around 1.5 kb, gene
25 replacement was confirmed by restricting the 1.5 kb PCR product with *Sma*I to release the 0.9 kb-Km non-polar cassette.

For 15 of the 38 ubiquitous PEGs, we were unable to obtain kanamycin transformants when introducing a non polar mutation in N6, X47-2An, 26695, although the genes were found to be present in every isolates (ubiquitous). One
30 or two very rare clones were obtained for some of the genes exclusively in HAS141. All these kanamycin resistant HAS141 transformants were positive

when tested by hybridization with the labeled pILL570-• vector used as a probe, again attesting for the presence of rare but possible single crossing-over seen under strong selective pressure. These 15 genes (*hp0175*, *hp0231*, *hp0377*, *hp0394*, *hp0659*, *hp0739*, *hp0862*, *hp0928*, *hp1012*, *hp1014*, *hp1085*, *hp1230*,
5 *hp1245*, *hp1265*, *hp1568*) can thus be definitively recognized as genes essential for the viability of *H. pylori* *in vitro*. Among these 15 genes, 9 are known to be genes that encode proteins involved in protein-protein interactions, and 6 were selected as encoding *H. pylori* specific protein without known function. They encode proteins with properties that will be discussed and classified in regards to
10 their potential as putative therapeutical targets.

Search for interacting proteins when using the 6 ubiquitous *H. pylori* specific essential genes as a bait in the two hybrid assay

The *hp0231*, *hp0394*, *hp0659*, *hp1085*, *hp1265*, and *hp1568* ORFs were cloned in the pB6vector and used as individual bait for the identification of
15 interacting proteins (Table 7).

Proteomic screens conducted for HP0231, HP1085, HP1568 did not provide data allowing assignation of a putative function and did not reveal homodimeric interaction underline the usefulness of the protein as a possible therapeutic target. Those genes remain ubiquitous, essential, *H. pylori* specific and without
20 known function. In contrast, HP0394, HP0659 and HP1265 gave positive screens (Table 7).

Classification of twelve of the 15 ubiquitous essential genes.

The combination of both essentiality as well as the identification of interacting domains might serve as a direct pathway for the design of active
25 compounds capable of inhibiting protein-protein interactions and possibly bacterial growth. Of the 15 ubiquitous essential genes identified by the procedure, 12 were shown to be involved in protein-protein interaction and could be classified in different categories with regards to their potential as putative therapeutic targets.

The first category consists of ubiquitous ORFs encoding proteins with heterodimeric protein-protein interactions in the two-hybrid assay where both partners are playing an essential role for the viability of *H. pylori* and at least one of the two partners is *H. pylori* specific. Four of the twelve essential ORFs answer these criteria *hp0394*, *hp0862*, *hp1230*, and *hp0659* which encode proteins with no known or putative function. Although initially annotated as *H. pylori* specific, the recent publication of the *Campylobacter* genome demonstrates for some of them the existence of homologues in this closely phylogenetically related bacteria, but no homologues have been identified in the other bacterial genomes so far sequenced.

The *hp1230* gene encodes a protein that has been recognized via the two hybrid assay as an homodimeric protein which interacts with the predicted chromosomal replication initiator protein, DnaA, encoded by *hp1529*. The proteomic screen allowed the identification of a specific domain of interaction (SID) lying between AA31 and AA180 of HP1230 (SID1230) and a SID of 87 AA within the N-terminal domain of HP1529 or DnaA (AA12 to AA99) (SID1529) (Rain *et al.*, 2001). To examine whether the HP1230/HP1529 interaction was specific and could serve as a target for screening of lead compounds with bactericidal activity, the oligonucleotide encoding SID1529 was randomly mutagenized, and selected, through the two-hybrid system, mutated *sid* that abolished the specific HP1230/HP1529 interaction. This allowed the demonstration of the fact that isoleucine 58 and Lysine 61 were involved in the HP1230/HP1529 interaction since a double mutant I58F/K61I within *sid1529* abolished this interaction. This mutagenesis random procedure also led to the isolation of a mutated SID1529* (V53L) which confers a superbinder phenotype to HP1529 in the two-hybrid system. When overexpressed in the three-hybrid system (Tirode *et al.*, 1997) under the control of the regulated Met25 promoter in vector p3H1 (Colland *et al.*, 2001) (Figure 3), the superbinder SID1529* completely inhibits the HP1230/HP1529 interaction. Thus, oligopeptide – PNQLLCTTITAKYG- (SEQ ID No. 6588) or overlapping or combinatory derivatives have some potential as lead compounds to inhibit *H. pylori* growth.

Another example of this category of interest is the *hp0862* gene. The two-hybrid screen procedure revealed interactions between the HP0862-gene product and the C-terminal domain (AA100 to AA191) of the thymidylate kinase (HP1474), an essential enzyme responsible for the first phosphorylation step in the conversion of deoxythymidine 5'-monophosphate to deoxythymidine 5'-diphosphate for the final production of dTTP. As for HP1230, the actual function of the HP0862 encoding gene is unknown, but its essential character and interaction with a known essential enzyme (Tmk) might orient further functional analysis, and encouraged the definition of more precise domain of interactions between the Tmk protein and this new specific interacting protein.

The *hp394* and *hp659* might also enter this category. They both encode protein essential specific to *H. pylori*. The *hp394* encodes a protein whose C-terminal domain (last 76 AA) interacts with the β -subunit of the acetylcoenzyme A carboxylase transferase (HP950). This enzyme has an essential function in membrane lipid synthesis and catalyses the formation of malonyl-CoA, the first intermediate for fatty acid synthesis. The protein encoded by *hp0659* interacts with a putative outer membrane protein HP0655 with no known function. The essential property of *hp0655* has not yet been tested and thus the classification of the *hp0659* gene in this first category has to be confirmed.

- The second category includes genes essential for *H. pylori* encoding predicted proteins with known functions. The characteristic of this category is that these genes essential in *H. pylori* have not been reported to be lethal in other organisms. Thus targeting the proteins encoded by these genes might be relevant of a selective drug design specifically directed against *H. pylori*. Three of the twelve essential genes displayed this characteristic: *hp0377* and *hp0175*, they both encode periplasmic proteins. *Hp0377* encodes a protein partially homologue to DsbC a thiol-disulfide interchange periplasmic protein involved in disulfide bond formation (Zapun *et al.*, 1995). So far, no other genes encoding Dsb-like proteins have been identified in the genome of *H. pylori* whereas in *E. coli*, as many as five proteins are required for disulfide bond formation in the periplasm. In *E. coli*, *dsbC* encodes a stable homodimer with both protein-disulfide

isomerase and chaperone activities (McCarthy *et al.*, 2000), and is not essential probably due to redundancy of the function. In contrast, in *H. pylori* we demonstrate the essential character of that gene. The HP0377 product interacts in the two-hybrid assay with the last 100 C-terminal amino acids (SID) of the
5 homodimeric secreted cysteine containing protein encoded by *hp0224*. The HP0224 product is a methionine sulfoxide reductase homologue (MsrA). In *E. coli*, MsrA plays a role in response to oxidative damage by reducing the methionine sulfoxide residues (Moskovitz *et al.*, 1995), and directly, or indirectly contributes to the maintenance of adhesins (Wizemann *et al.*, 1996). The *H.*
10 *pylori* MsrA homologue (HP0224) was identified as one of the major antigens released into the extracellular space (Cao *et al.*, 1998). Thus, the HP0377 encoding DsbC is a good *H. pylori* specific target candidate because of the essential character unique to the bacterial species, and the accessibility of the protein within the periplasmic space.

15 The *hp0175* gene is another representative of this category. The gene encodes a predicted peptidyl-propyl cis-trans isomerase, an enzyme that accelerates protein folding by catalyzing the cis-trans isomerization of proline imidic peptide bonds in oligopeptides. Two-hybrid screening identified HP0608, a *H. pylori* specific protein of unknown function, as interacting partner with HP0175.
20 The essential character of the gene, documented in this study, as for HP0377, has not been reported for other microorganisms and appears unique to the species.

Finally, *hp1265* is a very unique and specific target for *H. pylori*. This essential gene is part of a large cluster of 14 genes (*hp1260* to *hp1273*) among
25 which 12 encode homologues of 12 of the 14 subunits of the NADH oxidoreductase complex of *E. coli*. In *E. coli* inactivation of the genes encoding the different subunits (*nuo*) is not lethal for the bacterium. In *H. pylori* inactivation of *hp1263* is not lethal, but inactivation of one of the two *H. pylori* specific subunit encoding gene is lethal, indicating that the HP1265 subunit which should be the
30 subunit involved in the NADH binding has very unique properties deserving further functional investigations.

- A third category, consists in ORFs that encoded conserved hypothetical proteins, distributed in almost all the sequenced bacterial genomes, for which no function has been assigned, nor the essentiality assessed. We report here on the essential character of two of them the *hp0739* gene which encodes a protein that interacts with another conserved hypothetical but non essential protein (HP810), and *hp1012*. In the two sequenced *H. pylori* genomes (26695 and J99), the *hp0739* gene is flanked by two genes involved in the biosynthesis of the peptidoglycan, and its involvement in this biosynthetic pathway remains to be explored. The *hp1012* gene encoded a protein, which has similitude with some metallo-proteases, however the function of this specific protease is unknown. These two proteins with large distribution spectrum, so far unknown as essential genes, represent new putative targets.

- Finally, a fourth category, includes ORFs with known functions that were previously shown to be essential in other microorganisms. The present work allows us to extend this property to the *H. pylori* species, and reinforces their value as putative targets with large spectrum. The *hp0928* gene is one of those; it was selected through the two-hybrid screen as an homodimer. By similarity, the assigned function was that of GTP cyclohydrolase (*folE*) involved in the first step of the biosynthetic pathway of tetrahydrofolate, the structure of which was shown to be a homodecameric complex form of two pentamers. Both, the inability to succeed in knocking out that gene, and its oligomeric structure supports the assigned function. The two-hybrid screening procedure delineates a domain of interaction consisting of 133 amino-acids between the *FolE* subunits. This domain might serve as a therapeutical target for the screening of lead compounds with large bacterial spectrum. The *hp1014* gene (*hdhA*) encodes an NAD⁺-dependent oxidoreductase belonging to the short-chain dehydrogenase/reductase (SDR 1 family). The enzyme is known to require a tetrameric form to be active in *E. coli* (Yoshimoto et al., 1991) which was compatible with the homodimeric interaction observed in the two hybrid assay. The major interest of these two ORFs resides in their well known enzymatic activity, which provides a direct way to screen lead compounds capable of

abolishing the enzymatic activity through the disruption of the oligomeric interactions. The present work also classifies *hp1245* as an essential gene of this category. This gene encodes the SSB protein, the single strand binding protein, involved in DNA replication, recombination and DNA repair, and such observation
5 is confirmatory of work previously done in other model microorganisms. HP1245 was found to interact with HP0650, a non-essential protein of unknown function, but also significantly with HP0661, a predicted ribonuclease H involved in DNA replication, a finding consistent with the HP1245 function.

10 In order to fully illustrate the present invention and advantages thereof, the following specific examples are given, it being understood that the same are intended only as illustrative and in nowise limitative.

EXAMPLES

15 Example 1: Preparation of a *Helicobacter pylori* genomic collection

1.A. Fragment collection preparation and transformation in *E. coli*

1.B. Collection transformation in *Saccharomyces cerevisiae*

1.C. Construction of bait plasmid

Example 2: Screening the collection with the two-hybrid in yeast system

20 2.A. The mating protocol

2.B. The X-Gal overlay assay

2.C. The luminometry assay

Example 3: Identification of positive clones

3.A. PCR on yeast colonies

25 3.B. Plasmid rescue from yeast by electroporation

Example 4: Detection of protein-protein interaction

Example 5: Identification of SID®

Example 6: Screening of modulating agent

Example 7: Gene therapy Example using SID® polypeptides

5 Example 8: Making of polyclonal and monoclonal antibodies

Example 9: Classification of genes of *H. pylori*

Example 10: Study of the interaction between two essential genes, HP1230-HP1529, by random mutagenesis.

10 Medium composition and standard protocols are available in Maniatis *et al.*

Example 1: Preparation of a *Helicobacter pylori* genomic collection

1.A. Collection preparation and transformation in *Escherichia coli*

1.A.1. Fragment of genomic DNA preparation

15 The *Helicobacter pylori* genomic DNA is fragmented in a nebulizer (GATC) for 1 minute, precipitated and resuspended in water.

The obtained nebulized genomic DNA is successively treated with Mung Bean Nuclease (Biolabs) (30 minutes at 30°C), T4 DNA polymerase (Biolabs) (10 minutes at 37°C) and Klenow enzyme (Pharmacia) (10 minutes at room
20 temperature and 1 hour at 16°C).

DNA is then extracted, precipitated and resuspended in water.

1.A.2. Ligation of linkers to blunt-ended genomic DNA

Oligonucleotide PL160 (5' end phosphorylated) 1 µg /µl and PL159 2µg/µl.

Sequence of the oligo PL160 : 5'-ATCCCGGACGAAGGCC-3' (SEQ ID NO. 3257)

Sequence of the oligo PL159 : 5'-GGCCTTCGTCCGG-3' (SEQ ID NO. 3258)

Linkers were preincubated (5 minutes at 95°C, 10 minutes at 68°C, 15 minutes at 42°C) then cooled down at room temperature and ligated with genomic DNA inserts at 4°C overnight.

Linkers were further removed on a separation column (Chromaspin TE 400, Clontech), according to the manufacturers protocol.

1.A.3. Vector preparation

pACT11st is successively digest with *Bam*HI restriction enzyme (Biolabs) for 1 hour at 37°C, dephosphorylated with Calf Intestine Phosphatase (CIP) (Biolabs) and filled in with dGTP using Vent DNA polymerase (exo-) (Biolabs), extracted, precipitated and resuspended in water.

1.A.4. Ligation between vector and insert of genomic DNA

The prepared vector is ligated overnight at 15°C with the genomic blunt ended DNA described in section 2 using T4 DNA ligase (Biolabs). The DNA is then precipitated and resuspended in water.

1.A.5. Library transformation in *Escherichia coli*

Transform DNA from section 1.A.4 into Electromax DH10B electrocompetent cells (Gibco BRL) with a Cell Porator apparatus (Gibe BRL). Add 1 ml SOC medium and incubate transformed cells at 37°C for 1 hour. Add 9 ml volume of SOC medium per tube and plate on LB+ampicillin medium. Scrape colonies with liquid LB medium. Aliquot and freeze at -80°C.

The obtained collection of recombinant cell clones was named HGXBHP1 (CNCM N° I-2181).

1.B. Collection transformation in *Saccharomyces cerevisiae*

The *Saccharomyces cerevisiae* strain (Y187 (MAT α Gal Δ Gal80 Δ ade2-101 His3 Leu2-3, -112 Trp1-901 Ura3-52 URA3::UASGAL1-LacZ Met)) transformed with the HGXBHP1 *H. pylori* genomic DNA library.

The plasmid DNA contained in *E. coli* were extracted (Qiagen) from aliquoted *E. coli* frozen cells (1.A.5.).

Grow *Saccharomyces cerevisiae* yeast Y187 in YPGlu.

Yeast transformation is performed according to standard protocol (Giest et al. Yeast, 11, 355-360, 1995) using yeast carrier DNA (Clontech). This experiment leads to 10^4 to $5 \cdot 10^4$ cells/ μ g DNA. Spread $2 \cdot 10^4$ cells on DO-Leu medium per plates. Aliquot and freeze at -80°C .

1. C. Construction of bait plasmid

The genomic amplification of the ORF is obtained by PCR using the Pfu proofreading Taq polymerase (Stratagene) and 200 ng of genomic DNA as the template. PCR primers are chosen in regions flanking the ORF.

Set up the PCR program as followed:

94°	45"	x 30 cycles
94°	45"	
48°	45"	
72°	6'	
72°	10'	
15°	∞	

Check amplification on agarose gel.

Purify PCR fragments with Qiaquick column (Qiagen) according to the manufacturer's protocol.

Digest purified PCR fragments with adequate restriction enzymes.

Purify PCR fragments with Qiaquick column (Qiagen) according to the manufacturer's protocol.

Ligate digested PCR fragments into an adequately digested and dephosphorylated bait vector (pAS2 $\Delta\Delta$) according to standard protocol (Maniatis et al.).

Transform into competent bacterial cells. Grow cells, extract DNA and sequence plasmid.

Example 2: Screening the collection with the two-hybrid in yeast system

2.A. The mating protocol

We have chosen the mating two-hybrid in yeast system (first described by Legrain et al., Nature Genetics, 1997, vol. 16, 277-282, *Toward a functional analysis of the yeast genome through exhaustive two-hybrid screens*) for its advantages but we could also screen the *Helicobacter pylori* collection in the classical two-hybrid system as described in Fields et al, or in a yeast reverse two-hybrid system.

The mating procedure allows a direct selection on selective plates because the two fusion proteins are already produced in the parental cells. No replica plating is required.

This protocol is written for the use of the library transformed into the Y187 strain. Before mating, transform *S. cerevisiae* (CG 1945 strain (MATa Gal4-542 Gal180-538 ade2-101 His3*200 Leu2-3,-112 Trp1-901 Ura3-52 Lys2-801 URA3::GAL4 17mers (X3)-CyC1TATA-LacZ LYS2::GAL1UAS-GAL1TATA-HIS3 CYH^R)) according to step 1.B and spread on DO-Trp medium.

Day 1, morning : preculture

Preculture of Y187 cells carrying the bait plasmid obtained at step 1.C. in 20 ml DO-Trp medium. Grow at 30°C with vigorous agitation.

Day 1, late afternoon : culture

Measure OD_{600nm} of the DO-Trp preculture of Y187 cells carrying the bait plasmid preculture. The OD_{600nm} must lie between 0.1 and 0.5 in order to correspond to a linear measurement.

- 5 Inoculate 150 ml DO-Trp at OD_{600nm} 0.006/ml, grow overnight at 30°C with vigorous agitation.

Day 2 : matingMedium and plates

5 YPGlu plates

- 10 50 ml tube with 30 ml DO-Leu-Trp-His

100 ml flask with 20 ml of YPGlu

75 DO-Leu-Trp-His plates

2 DO-Leu plates 2 DO-Trp plates

2 DO-Leu-Trp plates

- 15 Measure OD_{600nm} of the DO-Trp culture. It should be around 1.

For the mating, you must use twice as many bait cells as library cells. To get a good mating efficiency, you must collect the cells at 10⁸ cells per cm².

Estimate the amount of bait culture (in ml) that makes up 80 OD_{600nm} units for the mating with the prokaryote library.

- 20 Thaw a vial containing the HGXYHP1 library slowly on ice. Add the contents of the vial to 20 ml YPGlu. Let those cells recover at 30°C, under gentle agitation for 10 minutes.

Mating

Put the 80 OD_{600nm} units of bait culture into a 250 ml flask.

Add the HGXYHP1 library culture to the bait culture. Transfer the mixture of diploids into 50 ml sterile tubes. Centrifuge, discard the supernatant and resuspend in YPGlu medium.

- Distribute cells in 400 μ l samples in YPGlu plates with glass beads.
- 5 Spread cells by shaking the plates.

Incubate plates cells-up at 30°C for 4h30min.

Collection of mated cells

Wash and rinse plates and spread collected cells on DO-Leu-Trp-His+Tet plates.

10 Day 4

Selection of clones able to grow on DO-Leu-Trp-His+-Tetracyclin : this medium allows us to isolate diploid clones presenting an interaction.

Count the His+ colonies on control plates.

The number of His+ cell clones will define which protocol is to be processed:

15 Upon 20×10^6 His+ colonies

- if the number of His+ cell clones > 285 : then process overlay and then luminometry protocols on blue colonies (2.B and 2.C).
- If the number of His+ cell clones < 285 : process luminometry protocol (2.C).
- 20 - The following step leads to the selection of the strongest interaction.

2.8. The X-Gal overlay assay

The X-Gal overlay assay is performed directly on the selective medium plates after scoring the number of His+ colonies.

Material

Set up a waterbath. The water temperature should be 50°C.

- 0.5 M Na_2HPO_4 pH 7.5.
- 1.2% Bacto-agar.
- 2% X-Gal in DMF.
- 5 • Overlay mixture : 0.25 M Na_2HPO_4 pH7.5, 0.5% agar, 0.1% SDS, 7% DMF (LABOSI), 0.04% X-Gal (ICN). For each plate, 10 ml overlay mixture are needed.
- DO-Leu-Trp-His plates.
- Sterile toothpicks.

Experiment

- 10 Temperature of the overlay mix should be between 45 and 50°C.

Pour the overlay-mix over the plates in portions of 10 ml.

Collect them when the top layer is settled.

Incubate plates overlay-up at 30°C. Note the time.

- 15 Check for blue colonies regularly. If no blue colony appears, wait for overnight incubation. Mark with a pen and number the positives.

Streak the positives colonies on fresh DO-Leu-Trp-His plates with a sterile toothpick.

2. C. The luminometry assay

- 20 Grow His⁺ colonies overnight at 30°C in microtiter plates containing DO-Leu-Trp-His+Tetracyclin medium with shaking. The day after, dilute 15 times overnight culture into a new microtiter plate containing the same medium. Incubate 5 hours at 30°C with shaking. Dilute samples 5 times and read OD_{600nm}. Dilute again to obtain between 10,000 and 75,000 yeast cells/well in 100 µl final volume.

Per well, add 75 μ l of One Step Yeast Lysis Buffer (Tropix), 20 μ l SapphireII Enhancer (Tropix), 4 μ l Galacton Star (Tropix), incubate 40 minutes at 30°C. Measure the β -Gal read-out (L) using a Luminometer (Trilux, Wallach).

Calculate value of $OD_{600nm} \times L$ and select interacting preys having the highest values.

At this step of the protocol, we have isolated diploid cell clones presenting interactions. The next step is now to identify polypeptides involved in the selected interactions.

Example 3: Identification of positive clones

3.A. PCR on yeast colonies

Introduction

PCR amplification of fragments of plasmid DNA directly on yeast colonies is a quick and efficient procedure to identify sequences cloned into this plasmid. It is directly derived from a published protocol (Wang H. et al., Analytical Biochemistry, 237, 145-146, 1996). However, it is not a standardized protocol : in our hands it varies from strain to strain, it is dependent of experimental conditions (number of cells, *Taq* polymerase source, etc). This protocol should be optimized to specific local conditions.

Materials

- For 1 well, PCR mix composition is:

32.5 μ l water,

5 μ l 10X PCR buffer (Pharmacia),

1 μ l dNTP 10 mM,

0.5 μ l *Taq* polymerase (5 μ l / μ l) (Pharmacia),

0.5 μ l oligonucleotide ABS1 10 pmole/ μ l:

5'-GCGTTTGAATCACTACAGG-3' (SEQ ID NO. 3259)

0.5 μ l oligonucleotide ABS2 10 pmole/ μ l:

5'-CACGATGCACGTTGAAGTG-3' (SEQ ID NO. 3260)

- 1 N NaOH.

5 Experiment

Grow positive colonies overnight at 30°C on a 96 well cell culture cluster (Costar), containing 150 μ l DO-Leu-Trp-His+Tetracyclin with shaking. Resuspend culture and transfer immediately 100 μ l on a Thermowell 96 (Costar).

Centrifuge 5 minutes at 4,000 rpm at room temperature.

10 Remove supernatant. Dispense 5 μ l NaOH in each well, shake 1 minute.

Place the Thermowell in the thermocycler (GeneAmp 9700, Perkin Elmer) 5 minutes at 99.9°C and then 10 minutes at 4°C.

In each well, add PCR mix, shake well.

The PCR program was set up as followed :

15	94°C	3 minutes	x 35 cycles
	94°C	30 secondes	
	53°C	1 minute 30 secondes	
	72°C	3 minutes	
	72°C	5 minutes	
20	15°C	∞	

The quality, the quantity and the length of the PCR fragment was checked on an agarose gel. The length of the cloned fragment was the estimated length of the PCR fragment minus 300 base pairs that corresponded to the amplified flanking plasmid sequences.

25

3.B. Plasmids rescue from yeast by electroporation

Introduction

The previous protocol of PCR on yeast cell may not be successful, in such a case, plasmids from yeast by electroporation can be rescued. This experiment allows the recovery of prey plasmids from yeast cells by transformation of *E. coli* with a yeast cellular extract. The prey plasmid can then be amplified and the cloned fragment can be sequenced.

Material

Plasmid rescue

10 Glass beads 425-600 μm (Sigma)

Phenol/chloroform (1/1) premixed with isoamyl alcohol (Amresco)

Extraction buffer: 2% Triton X100, 1 % SDS, 100 mM NaCl, 10 mM TrisHCl pH 8.0, 1 mM EDTA pH 8.0.

15 Mix ethanol/ NH_4Ac : 6 volumes ethanol with 7.5 M NH_4 Acetate, 70% Ethanol and yeast cells in patches on plates.

Electroporation

SOC medium

M9 medium

Selective plates: M9-Leu+Ampicillin

20 2 mm electroporation cuvettes (Eurogentech)

Experiment

Plasmid rescue

Prepare cell patch on DO-Leu-Trp-His with cell culture of section 2.C.

Scrape the cell of each patch into an Eppendorf tube, add 300 μ l of glass beads in each tube, then, add 200 μ l extraction buffer and add 200 μ l phenol:chloroform:isoamyl alcohol (25:24:1).

Centrifuge tubes 10 minutes at 15,000 rpm.

- 5 Transfer 180 μ l supernatant to a sterile Eppendorf tube and add to each 500 μ l ethanol/ NH_4Ac , vortex.

Centrifuge tubes 15 minutes, 15,000 rpm at 4°C

Wash pellet with 200 μ l 70% ethanol, remove ethanol and dry pellet.

Resuspend pellet in 10 μ l water. Store extracts at -20°C.

10 Electroporation

Material : Electrocompetent MC1066 cells prepared according to standard protocols (Maniatis).

Add 1 μ l of yeast plasmid DNA-extract to pre-chilled Eppendorf tube, and keep on ice.

- 15 Mix 1 μ l plasmid yeast DNA-extract sample, add 20 μ l electrocompetent cells and transfer in a cold electroporation cuvette.

Set the Biorad electroporator on 200 ohms resistance, 25 μ F capacity; 2.5 kVolts. Place cuvette in the cuvette holder and electroporate.

- 20 Add 1 ml SOC into the cuvette and transfer the cell-mix into a sterile Eppendorf tube. Let cells recover for 30 minutes at 37°C, spin the cells down 1 minute, 4,000x g and pour off supernatant. Keep about 100 μ l medium and use it to resuspend the cells and spread them on selective plates (e.g., M9-Leu plates).

Incubate plates for 36 hours at 37°C.

- 25 Grow one colony and extract plasmids. Check presence and size of insert through enzymatic digestion and agarose gel. Sequence insert.

Example 4: Protein-protein interaction

For each bait, the previously protocol leads to the identification of prey polynucleotide sequences. In order to identify a protein-protein interaction, we need to characterize the obtained prey polypeptide sequence regarding the
5 *Helicobacter pylori* genome.

This may be accomplished with a software program named blastwun (available on the Internet site of the University of Washington <http://bioweb.pasteur.fr/seqanal/interfaces/blastwu.htm>, this is a development version of software for gene and protein identification through similarity searches
10 of protein and nucleotide sequence databases).

Blastwun program compares prey polynucleotide insert sequence (rescued from prey plasmid) with whole *Helicobacter pylori* genome (available on NCBI web site: <http://www.ncbi.nlm.nih.gov> under GenBank accession number AE000511). This comparison leads to prey polynucleotide localizations in the *H.*
15 *Pylori* genome, each localization having a score depending on the homology of sequence. For each prey polynucleotide, we consider the localization with the highest score and, if the insert sequence is included in and is in phase with an Open Reading Frame, we can identify one prey polypeptide interacting with one bait polypeptide.

20 *Helicobacter pylori* ORF's sequences are available on the World-Wide Web site of The Institute for Genomic Research (TIGR) at <http://www.tigr.org/tdb/mbd/hpdb/hpdb.html>.

This web page allows several requests concerning *Helicobacter pylori*'s genome, in particular, its ORF sequence. To get the sequences of specific
25 ORF's, click on the window named "HP#" and click search. This operation leads to a new web page presenting nucleic and peptide sequence of the specific ORF.

See Table 1 : Protein-protein interactions in *Helicobacter pylori*.

Example 5: Identification of SID®

Experiment results in step 4. sequences of each prey fragment encoding for an interacting prey polypeptide.

By comparing and selecting the intersection of every isolated fragments that are included in the same polypeptide, we define the Selected Interacting
5 Domain (SID®) see Figure 15.

See results in Table 2.

Example 6: Screening of modulating agent

Select one specific interaction.

Transform a permeabilized yeast cell with plasmids containing bait
10 polypeptide and prey polypeptide of the specific interaction.

Plate a top agar containing transformed permeabilized yeast cells on square boxes (that already contains agarose gel).

Apply by spotting the compounds to test on top agar as soon as it is solidified. Incubate overnight at 30°C.

15 Analyse results : select lead compounds that prevent transformed permeabilized yeast cells from growing.

Example 7: Gene therapy Example using SID® polypeptides

An expression vector containing the SID® polynucleotide is made in the manner described in U.S. Patent 4,980,286. It is then administered to patients to
20 treat *H. pylori* infections.

Example 8: Making of polyclonal and monoclonal antibodies

The protein-protein complex of Table 1 was injected into mice and polyclonal and monoclonal antibodies were made following the procedure set forth in Sambrook et al *supra*.

25 More specifically mice are immunized with an immunogen comprising complexes conjugated to keyhole limpet hemocyanin using glutaraldehyde or

EDC as is well known in the art. The complexes can also be stabilized by crosslinking as described in WO 00/37483. The immunogen is then mixed with an adjuvant. Each mouse receives four injections of 10 μ g to 100 μ g of immunogen, and after the fourth injection, blood samples are taken from the mice to determine if the serum contains antibodies to the immunogen. Serum titer is determined by ELISA or RIA. Mice with sera indicating the presence of antibody to the immunogen are selected for hybridoma production.

Spleens are removed from immune mice and single-cell suspension is prepared (Harlow et al 1988). Cell fusions are performed essentially as described by Kohler et al. Briefly, P365.3 myeloma cells (ATTC Rockville, Md) or NS-1 myeloma cells are fused with spleen cells using polyethylene glycol as described by Harlow et al. Cells are plated at a density of 2×10^5 cells/well in 96-well tissue culture plates. Individual wells are examined for growth and the supernatants of wells with growth are tested for the presence of Table 1 complex-specific antibodies by ELISA or RIA using the Table 1 complex as a target protein. Cells in positive wells are expanded and subcloned to establish and confirm monoclonality.

Clones with the desired specificities are expanded and grown as ascites in mice or in a hollow fiber system to produce sufficient quantities of antibodies for characterization and assay development. Antibodies are tested for binding to bait polypeptide (from column 1 of Table 1) alone or to prey polypeptide (from column 2 of Table 1) alone, to determine which are specific for the Table 1 complex as opposed to those that bind to the individual proteins.

Monoclonal antibodies against each of the complexes set forth in Table 1 are prepared in a similar manner by mixing specified proteins together, immunizing an animal, fusing spleen cells with myeloma cells and isolating clones which produce antibodies specific for the protein complex, but not for individual proteins.

Example 9: Classification of genes of *H. pylori* within function categories at the genomic scale using 2 exhaustive libraries in *E. coli*

1. Bacterial strains, growth and storage conditions.

Escherichia coli strains DH5 α (BRL) HB101 (Boyer and Roulland-Dussoix, 1969) and NS2114 (Rif^R) (Seifert *et al.*, 1986) were used as hosts for plasmid cloning and disruption experiments and were grown at 37°C in L-broth (10 g of tryptone, 5 g of yeast extract and 5 g of NaCl per liter, pH 7.0) or on L-agar plates (1.5% agar) at 37°C. Antibiotics were used at the following final concentrations (μ g/ml) unless indicated in the text: spectinomycin:100 (Upjohn Laboratories, Paris, France), tetracycline: 8 (Sigma Chemicals, Saint-Quentin Fallavier, France), kanamycin: 25 (Serva, Frankfurt, Germany), rifampicine:100 μ g (Sigma Chemicals). Independent recombinant *E. coli* were saved by storing up to 96 clones individually in 96-well microtitre plates; clones were inoculated into L-broth supplemented with 8 μ g/ml tetracycline, 100 μ g/ml spectinomycin and 7% DMSO (Sigma) and stored at -80°C. *H. pylori* strain 26695 (Tomb *et al.*, 1997), HAS141 (Janvier *et al.*, 1999), N6 (Ferrero *et al.*, 1992), X47-2an (GUY *et al.*, 1999) were routinely cultured on 10% horse blood agar medium (Blood Agar Base no. 2; Oxoid, Lyon, France) or in Brucella broth supplemented with 10 % Fecal Calf Serum (Gibco). Solid and liquid media contained supplements at the following final concentrations: 10 μ g vancomycin (Dakota Pharmaceuticals, Creteil, France), 2.5 IU polymyxin (Pfizer Laboratories, Orsay, France), 5 μ g trimethoprim (Sigma) and 4 μ g amphotericin B (Bristol-Myers Squibb, Paris, France)/ml. Plates were incubated at 37°C under microaerobic conditions in an anaerobic jar with a carbon dioxide generator (CampyGen, Oxoid) without catalyst. *H. pylori* that had undergone chromosomal allelic exchange were selected on medium supplemented with 25 μ g kanamycin.

25

Production of amplicons corresponding to each of the 1590 ORFs originally identified by TIGR in strain 26695: 1621 pairs of forward and reverse oligonucleotides targeting the 1590 ORFs of the genome of strain 26695, as assigned on the Webb site in 1997, were designed and synthesized by Eurogentec (Bel S.A., Seraing, Belgium). Pairs (sense and antisense, Table 3) of oligonucleotides were designed in order to allow full length amplification of each of the ORFs, with the exception of ORFs with a size over 3 kb that were split into

30

two or three PCR products. Every forward and reverse 21 bp-oligonucleotide was tagged respectively at its 5'extremity with a CAUCAUCAU (Seq ID No.3261) and a CUACUACUA (SEQ ID No. 3262) sequence. Genomic DNA of *Hp* strain 26695, prepared from cesium chloride extraction (Labigne-Roussel et al., 1988), was used as a template for PCR. Seventeen times 96 amplicons were produced by polymerase chain reactions (PCR) using a PCR-express thermal cycler through 40 cycles consisting of a denaturation step of 94°C for 2 mn, a primer annealing step of 50°C for 30 sec. and an extension step at 72°C for 2 mn, under a 96-well format. The amplicons were controlled for size and quality (single band) on agarose gel.

Systematic UDG cloning of the ORFs of *H. pylori* strain 26695

The cloning of the 96 amplicons was performed using the ligation-independent method described by Rashtchian (Rashtchian, 1995). First the linear pLL570-• derivative vector was prepared by gene amplification using #570-1 and #570-2 (Table 4) as primers and the pLL570 plasmid (Labigne et al., 1992) as a template. Three microliters of individual HP0001 to HP1590 PCR products were mixed together with 2 µl of pLL570-• derivative vector (75 ng), 14 µl of 1XPCR buffer, 1 µl of uracil DNA glycosylase (UDG) in a 2000-µl 96-well disposable plate. The plates were incubated at 37°C for 30 mn allowing the enzymatic reaction as well as the hybridization between protruding and complementary extension hybridization to occur. Competent DH5α cells (100 µl) harboring the pTCA plasmid (Seifert et al., 1986) were added to each well, and the 96-well plate was further incubated for 45 mn on ice. One ml of prewarmed L-broth was added to each well, and the plate was then incubated for 90 mn at 37°C. Finally, a selective antibiotic cocktail containing spectinomycin, tetracycline was added to each well to positively select and enrich in pLL570-• derivative recombinant plasmid transformed DH5α(pTCA) cells; plates were then incubated for another 13 hours at 37°C under agitation. Individual transformant colonies were isolated by spotting 10 µl of liquid culture from each well on square agar plates containing tetracycline and spectinomycin using a 96-well inoculator designed to deliver a 10

µl liquid volume; cloning of the PCR product was confirmed by mini-preparation recombinant plasmid restricted with *Cla*I-AvaI. They were stored in DMSO (7%) at -80°C under a 96-well format as "library I" consisting of plate I.1 to plate XVII.1.

5

Systematic disruption of the recombinant plasmids by transposon mutagenesis in *E. coli*. Transposon mutagenesis of individual *E. coli* clones was performed using the mini-Tn3-Km transposon as previously described by Jenks *et al.* (Jenks *et al.*, in press). All manipulations were performed in a 96-well format and four independent transposon mutageneses were carried out in parallel so as to saturate the mutagenesis disrupting process with independent events. Briefly, the stored microtitre plates containing the individual *E. coli* DH5α clones that harbored the pTCA plus the recombinant pLL570-• derivative plasmids were thawed and used to inoculate fresh plates. Plasmid pLL553 harboring the mini-Tn3-Km transposon (Seifert *et al.*, 1986) (Labigne, 1997) (a low copy auto-transferable plasmid pOX38 derivative) was transferred into these *E. coli* DH5α clones by conjugation. Transconjugates harboring all three plasmids (recombinant pLL570-• derivative, pTCA and pLL553), were selected by spotting 10 µl of the mating mixture on L-agar containing 25 µg/ml kanamycin, 8 µg/ml tetracycline and 100 µg/ml spectinomycin. Cointegrates were transferred by conjugation into *E. coli* NS2114SmRif carrying the *cre* gene. Positive selection of resolved forms of the cointegrates was obtained by growth on L-agar containing 100 µg/ml rifampicin (Sigma), 625 µg/ml kanamycin, 625 µg/ml spectinomycin and 625 µg/ml streptomycin. A pool of each TnKm disrupted recombinant plasmids was stored as individual stock of disrupted ORFs at -80°C in DMSO (7%), designated "library II" consisting of plate I.2 to plate XVII.2.

DNA preparation and standard molecular biology techniques. The alkaline lysis procedure (Sambrook *et al.*, 1989) was used for small-scale preparation and MIDI Qiagen (Qiagen, Courtaboeuf, France) columns were used for large-scale plasmid preparation. Whole-cell genomic DNA from individual generated *H. pylori* mutants was extracted using the QIAamp Tissue Kit (Qiagen) according to the

30

manufacturer's instructions. Standard procedures for DNA/DNA hybridization were prepared on nitrocellulose membranes (Schleicher and Schuell,) according to the procedure of Sambrook et al. (Sambrook et al., 1989). They were hybridized under standard conditions with [α - 32 P]-deoxyribonucleotide probes
5 labeled by random priming using the MegaPrime DNA system (Amersham) according to the manufacturer's instructions.

Transformation of *H. pylori*. *H. pylori* strains were naturally transformed with circular plasmid DNA (~ 2 μ g per transformation). Briefly, bacteria were
10 inoculated as 1 cm patches and grown for 5 h before addition of 10 μ l supercoiled plasmid DNA. Each disrupted plasmid consisting either of a pool of disrupted plasmids when originating from library II or of a single recombinant plasmid for the non polar mutation construction was added to 4 independently prepared patches of *H. pylori*. After further incubation for 18 h, the bacteria from each
15 individual patch were harvested and plated directly onto a single plate of selective medium (kanamycin, 25 μ g/ml). Six individual kanamycin transformants were then subcultured. Chromosomal DNA was extracted using QiAmp kit extraction, and the constructed mutant characterized by several PCR controls and/or hybridization as described in the result section.

20

Introduction of a non polar mutation in a selected ORF (HP000X)

For a given cloned ORF (HP000X) present in Library I, the recombinant plasmid was prepared and used as a template for reverse PCR performed with two oligonucleotides. Oligonucleotide HP000X-1 consists of 24 nucleotides
25 complementary to an intragenic sequence located 300 bp downstream the 5'-end of the gene, and HP000X-2 consists of 24 nucleotides complementary to an intragenic sequence located 300 bp upstream of the 3'-end of the gene. All the HP00X-1 and HP000X-2 oligos were tagged respectively at their 5'-end with a CGGGGTACC (SEQ ID No. 3261) (*Kpn*I) sequence and at their 3'-end with a
30 CGCGGATCC (SEQ ID No. 3262) (*Bam*HI) sequence (Table 4). Following reverse amplification with high fidelity *Taq* polymerase (Boehringer) from the given cloned ORF, 5 μ l of PCR product were restricted with *Dpn*I in order to

eliminate the template molecule, then restricted with *KpnI* and *BamHI* and directly ligated to the promoterless non polar *KpnI-BamHI* kanamycin cassette (0.9 kb) previously described (Skouloubris *et al.*, 1998). Transformants were selected on spectinomycin containing plates. Recombinant plasmids were then purified, controlled, and introduced by natural transformation into *H. pylori* cells.

Example 10 – Study of the interaction between two essential genes, HP1230-HP1529, by random mutagenesis.

1. Preparation of mutagenized SID1529 collection

10 A. Collection preparation and transformation in *Escherichia coli*

i. A Random mutagenesis of SID1529 by PCR

Mutagenized SID1529 was obtained by PCR using the Taq polymerase (Stratagene) and 200 ng of *Helicobacter pylori* genomic DNA and the following oligonucleotides :

15 5'-ATTTGCGGCCGCAATCTTGGCGCTAGTCAAACAA-3' (SEQ ID No. 3263)

5'-CCGGGATCCTCAAGATTGGGCGTTAATTTGGAT-3' (SEQ ID No. 3264)

The PCR program was set up as follows :

20

94° 1'

45° 1' x 30 cycles

75° 1'

The PCR conditions were as follows :

KCl (50 mM), Tris pH 9.0 (10 mM), MgCl₂ (7 mM), MnCl₂ (0.2 mM)

The amplification was checked by agarose gel electrophoresis.

5

B. Digestion of mutagenized SID1529 and pP7-centro vector

The PCR fragments were purified with Qiaquick column (Qiagen) according to the manufacturer's protocol and digested (*NotI*-*Bam*HI). The vector (pP7-centro)
10 (see, Figure 20) was digested (*NotI*-*Bam*HI) and dephosphorylated according to standard protocol (Sambrook *et al.*).

C. Library transformation in *Escherichia coli*

15 The method followed in this section is the same as the one described in Example 1.A.5 above.

2. Collection transformation in *Saccharomyces cerevisiae*

20 The method followed in this section is the same as the one described in Example 1.B above.

3. Construction of HP1230 bait plasmid

The genomic amplification of the HP1230 ORF was obtained by PCR using the Pfu proofreading Taq polymerase (Stratagene) and 200 ng of *Helicobacter pylori* genomic DNA as template.

5 The PCR program was set up as follows:

94° 45"

94° 45"

48° 45"

72° 6'

x 30 cycles

10 72° 10'

The amplification was checked by agarose gel electrophoresis.

The PCR fragments were purified with Qiaquick column (Qiagen) according to the manufacturer's protocol. The digested PCR fragments were ligated into an adequately digested (BamHI-PstI) and dephosphorylated bait vector (pB1) according to standard protocol (Sambrook *et al.*) and were transformed into competent bacterial cells. The cells were grown, the DNA extracted and the plasmid was sequenced.

4. Screening the mutagenized SID1529 collection with the HP1230 bait protein using two-hybrid in yeast

20 The method followed in this section is the same as the one described in Example 2 above, with the exception that DO Leu-Trp-His + Tet plates were replaced by DO Leu-Trp-His + Tet + 40 mM 3-AT plates.

5. Identification of positive clones

25 The method followed in this section is the same as the one described in Example 3 above.

6. The SID 1529* (V53L) inhibits the interaction between HP1529 and HP1230

In the three-hybrid system, the HP1529 protein is expressed fused to the GAL4 Activation Domain (AD) in the pP6 plasmid, whereas HP1230 is introduced in the p3H1 vector in fusion with the DNA-binding domain (DBD) of GAL4. In addition, this vector contains the Met25 promoter which allow expression of a third partner in medium lacking methionine. After transformation of Y187 and CG1945 yeast by the pP6-HP1529 and p3H1-HP1230 vectors, respectively, both strains were mated. The resulting diploid strain was grown on a minimal medium lacking leucine and tryptophan to select for both plasmids (DO-2) and on DO-2 without histidine to select for interaction (DO-3). As a positive control, this strain was observed to grow on the selective medium for dilutions ranging from 1 to 10^{-4} (Figure 19, lane 1). This result shows an interaction between HP1230 and HP1529 proteins, as previously identified using library screening (Rain *et al.*, 2001).

Two different plasmids were used for this study: (i) the pP6 vector which contain the GAL4 activation domain (AD) (Rain *et al.*, 2001). One of the HP1529 fragments (nucleotides 1-1374) obtained by screening the HP1230 protein was selected and used as prey in the pP6 vector fused to GAL4 AD; (ii) the p3H1 vector which contains the DNA-binding domain (DBD) of GAL4 and a methionine-regulated Met25 promoter (Tirode *et al.*, 1997, J. Biol. Chem. 272: 22995-22999). The HP1230 encoding sequence of 540 bp was sub-cloned from pB1-HP1230 into the *Bam*HI/*Pst*I sites of p3H1 as fusion protein with GAL4-DBD giving p3H1-HP1230. In addition, the WT SID1529 or SID1529* (N38D-V53L) or SID1529* (V53L) were sub-cloned from pP7-centro (*Not*I-*Bam*HI) to the *Not*I/*Bgl*II sites of p3H1-HP1230 under the control of the Met25 promoter. Expression from the Met25 promoter is obtained in the absence of methionine. As negative control, we used a prey encoding the HP0875 protein. All PCR fragments and in frame fusions were checked by sequencing.

The pP6 and p3H1 derived-vectors were used to transform the Y187 and CG1945 yeast strains, respectively. Both strains were mated in YPD buffer (Yeast Peptone Dextrose; Bio 101, Inc) for 4 hours at 30°C and the resulting

diploid strain was selected on a minimal medium lacking leucine and tryptophane (DO-2). The interaction between proteins was observed in plates containing DO-2 deleted in histidine (DO-3) without methionine.

To assay whether The different versions of SID1529 can modulate this interaction, this protein was cloned in the p3H1-HP1230 vector under the control of the Met25 promoter. In the presence of the WT SID1529, growth was observed on DO3-Met medium thus showing that the WT SID1529 had little or no effect on the HP1230-HP1529 interaction (Figure 19, lane 2). In contrast, cells transformed with pP6-HP1529 and p3H1-HP1230-SID1529*(N38D-V53L) or p3H1-HP1230-SID1529* (V53L) were almost unable to grow on the selective medium (Figure 19, lanes 3-4). The growth of both strains in selective medium and in the presence of methionine (DO-3 + Met) was not affected, thus showing that the effect of SID1529* (N38D-V53L) or SID1529* (V53L) is a specific inhibition of the HP1230-HP1529 interaction (Figure 18, lanes 3-4). Taken together, these results clearly demonstrate that substitution of valine to leucine at position 53 of SID1529 led to complete inhibition of the HP1230-HP1529 interaction and confirm that SID1529 derivatived might have some potential as lead compounds to inhibit *Helicobacter pylori* growth.

Example 11 : Modulating compounds/PIM screening

The following results obtained from these Examples, as well as the teachings in the specification are set forth in the Tables below.

While the invention has been described in terms of the various preferred embodiments, the skilled artisan will appreciate that various modifications, substitutions, omissions and changes may be made without departing from the scope thereof. Accordingly, it is intended that the present invention be limited by the scope of the following claims, including equivalents thereof.

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TABLE 1**Complexes of interacting proteins**

1-Bait ORF	2-Prey ORF	1-Bait ORF	2-Prey ORF	1-Bait ORF	2-Prey ORF	1-Bait ORF	2-Prey ORF
HP0338	HP0132	HP1542	HP1430	HP0336	HP1479	HP0547	HP0802
HP0338	HP0337	HP1542	HP1542	HP0336	HP1541	HP0662	HP0662
HP0339	HP0006	HP0452	HP0155	HP0697	HP0012	HP0662	HP1168
HP0339	HP0116	HP0452	HP1409	HP0697	HP0048	HP0661	HP0432
HP0339	HP0178	HP0452	HP1523	HP0697	HP0558	HP0661	HP0605
HP0339	HP0252	HP0336	HP0056	HP0697	HP0599	HP0661	HP0609
HP0339	HP0267	HP0336	HP0066	HP0697	HP0696	HP0661	HP0876
HP0339	HP0298	HP0336	HP0100	HP0697	HP0864	HP0661	HP1245
HP0339	HP0488	HP0336	HP0112	HP0697	HP1037	HP1492	HP0172
HP0339	HP0544	HP0336	HP0116	HP0697	HP1038	HP1492	HP0351
HP0339	HP0578	HP0336	HP0145	HP0697	HP1299	HP1492	HP0464
HP0339	HP0613	HP0336	HP0154	HP0697	HP1576	HP1492	HP0593
HP0339	HP0626	HP0336	HP0192	HP1423	HP0697	HP1492	HP1041
HP0339	HP0705	HP0336	HP0230	HP1423	HP0775	HP1492	HP1286
HP0339	HP0736	HP0336	HP0281	HP1423	HP1024	HP1492	HP1533
HP0339	HP0922	HP0336	HP0306	HP1423	HP1198	HP0667	HP0620
HP0339	HP0961	HP0336	HP0364	HP1423	HP1222	HP0667	HP0770
HP0339	HP1084	HP0336	HP0405	HP1423	HP1421	HP0667	HP1430
HP0339	HP1092	HP0336	HP0470	HP1423	HP1529	HP0667	HP1571
HP0339	HP1156	HP0336	HP0476	HP0691	HP0692	HP1073	HP0552
HP0339	HP1207	HP0336	HP0540	HP0691	HP1362	HP1073	HP0973
HP0339	HP1241	HP0336	HP0592	HP0224	HP0224	HP1073	HP1309
HP0339	HP1333	HP0336	HP0605	HP0224	HP0919	HP1073	HP1409
HP0339	HP1373	HP0336	HP0621	HP0224	HP1374	HP1198	HP0088
HP0339	HP1513	HP0336	HP0626	HP0224	HP1409	HP1198	HP0268
HP1427	HP0025	HP0336	HP0660	HP0692	HP0197	HP1198	HP0293
HP1427	HP0116	HP0336	HP0665	HP0692	HP0584	HP1198	HP0452
HP1427	HP0229	HP0336	HP0680	HP0692	HP0887	HP1198	HP0705
HP1427	HP0289	HP0336	HP0701	HP0071	HP0288	HP1198	HP0775
HP1427	HP0317	HP0336	HP0717	HP0071	HP0378	HP1198	HP0965
HP1427	HP0373	HP0336	HP0760	HP0071	HP1165	HP1198	HP1032
HP1427	HP0810	HP0336	HP0774	HP0071	HP1450	HP1198	HP1114
HP1427	HP0896	HP0336	HP0775	HP0071	HP1503	HP1198	HP1124
HP1427	HP0913	HP0336	HP0779	HP0071	HP1503	HP1198	HP1198
HP1427	HP0944	HP0336	HP0786	HP0714	HP0116	HP1198	HP1274
HP1427	HP1120	HP0336	HP0794	HP0714	HP0289	HP1198	HP1378
HP1427	HP1157	HP0336	HP0795	HP0714	HP0527	HP1198	HP1411
HP1427	HP1157	HP0336	HP0850	HP0714	HP0528	HP1198	HP1541
HP1427	HP1157	HP0336	HP0858	HP0714	HP0552	HP1076	HP0033
HP1427	HP1243	HP0336	HP0903	HP0714	HP0714	HP1076	HP0275
HP1427	HP1342	HP0336	HP0919	HP0714	HP0958	HP1076	HP0304
HP0218	HP0527	HP0336	HP0929	HP0714	HP1138	HP1076	HP0319
HP1301	HP0030	HP0336	HP0996	HP0714	HP1300	HP1076	HP0449
HP1301	HP0705	HP0336	HP1026	HP0714	HP1446	HP1076	HP0753
HP1301	HP0887	HP0336	HP1037	HP0428	HP0284	HP1076	HP0841
HP1301	HP1409	HP0336	HP1132	HP0428	HP0705	HP1076	HP1544
HP1542	HP0289	HP0336	HP1236	HP0428	HP1350	HP1076	HP1563

HP1542	HP0289	HP0336	HP1241	HP0428	HP1409	HP1196	HP1409
HP1542	HP0289	HP0336	HP1266	HP1518	HP0116	HP1196	HP1514
HP1542	HP0601	HP0336	HP1274	HP1518	HP0705	HP1529	HP1230
1-Bait ORF	2-Prey ORF	1-Bait ORF	2-Prey ORF	1-Bait ORF	2-Prey ORF	1-Bait ORF	2-Prey ORF
HP1542	HP0609	HP0336	HP1325	HP1518	HP1065	HP0071	HP0278
HP1542	HP0610	HP0336	HP1332	HP1518	HP1489	HP0071	HP0570
HP1542	HP0610	HP0336	HP1434	HP0547	HP0299	HP0071	HP0775
HP1542	HP0740	HP0336	HP1452	HP0547	HP0601	HP0071	HP1340
HP1542	HP1273	HP0336	HP1452	HP0547	HP0687	HP0071	HP1409
HP0316	HP0621	HP0687	HP1503	HP0072	HP1489	HP0411	HP0304
HP0316	HP0895	HP0687	HP1506	HP0765	HP0764	HP0411	HP0464
HP0316	HP1350	HP0687	HP0174	HP0765	HP1024	HP0411	HP1019
HP1448	HP0107	HP0687	HP0687	HP0072	HP1489	HP0411	HP1326
HP0431	HP0547	HP0687	HP0759	HP0642	HP0642	HP0411	HP1453
HP0431	HP0705	HP0687	HP0942	HP1173	HP0528	HP0411	HP1470
HP0674	HP0033	HP0687	HP1185	HP1173	HP0595	HP0887	HP0610
HP0674	HP0862	HP0687	HP1212	HP1173	HP0610	HP0887	HP0887
HP0553	HP0553	HP0687	HP1510	HP1173	HP0816	HP0887	HP1157
HP0311	HP0312	HP0525	HP0389	HP1173	HP1553	HP0887	HP1464
HP1077	HP0304	HP0525	HP0513	HP1293	HP1198	HP1198	HP1032
HP1077	HP1472	HP0525	HP0525	HP1051	HP0435	HP1198	HP1218
HP0798	HP0798	HP0525	HP0550	HP1051	HP1513	HP1065	HP0918
HP0436	HP0010	HP0525	HP1409	HP1291	HP0278	HP1198	HP0264
HP0436	HP0072	HP0525	HP1411	HP1291	HP1283	HP1198	HP0371
HP0436	HP0858	HP0525	HP1451	HP1291	HP1409	HP1198	HP0615
HP0436	HP0887	HP0887	HP0459	HP1291	HP1553	HP1198	HP0655
HP0436	HP1019	HP0887	HP0610	HP0084	HP0392	HP1198	HP0793
HP0436	HP1513	HP0887	HP0699	HP0084	HP0950	HP1198	HP1002
HP0071	HP1409	HP0887	HP0887	HP0134	HP1012	HP1198	HP1048
HP0071	HP1550	HP0887	HP1157	HP0325	HP0246	HP1198	HP1069
HP1402	HP0420	HP0887	HP1460	HP0325	HP0278	HP0868	HP0088
HP1402	HP0621	HP0887	HP1464	HP0325	HP0338	HP0868	HP0327
HP1402	HP0657	HP0088	HP0011	HP0325	HP0399	HP0868	HP0869
HP1402	HP1355	HP0088	HP0088	HP0325	HP0449	HP0868	HP1142
HP0071	HP1409	HP0088	HP0221	HP0325	HP1321	HP0748	HP0048
HP0775	HP0033	HP0088	HP0437	HP0325	HP1409	HP0748	HP0100
HP0775	HP0056	HP0088	HP0464	HP0419	HP0321	HP0748	HP0695
HP0775	HP0231	HP0088	HP0792	HP0419	HP0419	HP0748	HP0736
HP0775	HP0285	HP0088	HP0974	HP0419	HP0862	HP0748	HP0748
HP0775	HP0378	HP0088	HP0988	HP0893	HP0862	HP0289	HP0289
HP0775	HP0621	HP0088	HP1045	HP0410	HP1080	HP0289	HP0289
HP0775	HP0645	HP0088	HP1096	HP0410	HP1198	HP0289	HP0610
HP0775	HP0705	HP0088	HP1198	HP1067	HP0392	HP0289	HP0887
HP0775	HP0775	HP0088	HP1535	HP0650	HP0012	HP0289	HP0922
HP0775	HP0792	HP1298	HP0012	HP0650	HP0272	HP0289	HP1038
HP0775	HP0965	HP1298	HP0278	HP0650	HP0317	HP0289	HP1542
HP0775	HP1063	HP1298	HP0449	HP0650	HP1026	HP0289	HP0289
HP0775	HP1274	HP1298	HP0522	HP0650	HP1245	HP0289	HP0289
HP0775	HP1355	HP1298	HP0528	HP0650	HP1547	HP0289	HP0610
HP0775	HP1409	HP1298	HP0696	HP0776	HP0067	HP0289	HP1355
HP1489	HP1489	HP1298	HP0705	HP0776	HP0278	HP0383	HP0547

HP1086	HP0019	HP1298	HP0770	HP0776	HP1378	HP0507	HP0172
HP1086	HP0278	HP1298	HP0887	HP0776	HP1409	HP0507	HP1409
HP1086	HP1409	HP1298	HP0950	HP0897	HP0422	HP0507	HP1489
HP0071	HP0189	HP1298	HP1379	HP0897	HP1362	HP1158	HP1158
HP0071	HP1072	HP1298	HP1403	HP0895	HP0316	HP1158	HP1329
1-Bait ORF	2-Prey ORF	1-Bait ORF	2-Prey ORF	1-Bait ORF	2-Prey ORF	1-Bait ORF	2-Prey ORF
HP0071	HP1165	HP0072	HP0017	HP0895	HP0426	HP1158	HP1409
HP0071	HP1486	HP0072	HP0073	HP0895	HP0894	HP1158	HP1527
HP0071	HP1503	HP0072	HP0156	HP0895	HP0895	HP0068	HP0070
HP0687	HP0705	HP0072	HP0216	HP0895	HP1409	HP0068	HP0118
HP0687	HP0889	HP0072	HP0437	HP0653	HP0247	HP0069	HP0067
HP0687	HP1072	HP0072	HP0610	HP0653	HP0653	HP0066	HP0066
HP0687	HP1329	HP0072	HP0680	HP0653	HP1012	HP0187	HP0020
HP0687	HP1487	HP0072	HP1138	HP0653	HP1409	HP0187	HP0231
HP0187	HP0254	HP1033	HP0379	HP1238	HP1488	HP0870	HP0748
HP0187	HP0705	HP0064	HP0063	HP1444	HP0010	HP0870	HP1157
HP0187	HP0862	HP1032	HP0643	HP1444	HP0088	HP0870	HP1243
HP0187	HP1414	HP1032	HP0818	HP1444	HP0099	HP0199	HP0278
HP0187	HP1513	HP1032	HP1122	HP1444	HP0392	HP0199	HP0356
HP0958	HP0353	HP1032	HP1198	HP1444	HP0760	HP0199	HP0449
HP0958	HP0522	HP1032	HP1316	HP1444	HP1116	HP0199	HP0891
HP0958	HP0582	HP0062	HP0062	HP1444	HP1332	HP0199	HP1198
HP0958	HP0714	HP0062	HP0103	HP1074	HP0347	HP0199	HP1313
HP0958	HP0884	HP0062	HP0170	HP1074	HP0593	HP0199	HP1314
HP0958	HP1428	HP0062	HP1156	HP1074	HP1278	HP0875	HP0874
HP0958	HP1462	HP0062	HP1409	HP1074	HP1316	HP0510	HP0347
HP0067	HP0069	HP0184	HP0123	HP1074	HP1399	HP0510	HP0510
HP0145	HP0116	HP0184	HP0238	HP1074	HP1493	HP1464	HP0132
HP0145	HP0281	HP0184	HP0354	HP1074	HP1497	HP1464	HP0740
HP0145	HP0468	HP0184	HP0609	HP0515	HP1409	HP1464	HP1198
HP0145	HP0887	HP0184	HP0655	HP0515	HP1537	HP1464	HP1464
HP0145	HP1274	HP0184	HP0705	HP0515	HP1561	HP1464	HP1510
HP0620	HP0620	HP0184	HP0793	HP1444	HP0088	HP0070	HP0068
HP0620	HP1409	HP0184	HP1409	HP1444	HP0392	HP0070	HP0070
HP0595	HP0025	HP0879	HP0033	HP1444	HP0422	HP0377	HP0033
HP0595	HP0060	HP0879	HP0066	HP1444	HP0655	HP0377	HP0145
HP0595	HP0595	HP0879	HP0252	HP1444	HP1332	HP0377	HP0183
HP0595	HP0870	HP0879	HP0401	HP1444	HP1493	HP0377	HP0194
HP0595	HP1052	HP0879	HP0407	HP1238	HP1238	HP0377	HP0224
HP0595	HP1430	HP0879	HP0421	HP1048	HP1198	HP0377	HP0285
HP0621	HP0609	HP0879	HP0626	HP0990	HP0085	HP0377	HP0399
HP0621	HP0610	HP0879	HP0649	HP0990	HP0116	HP0377	HP0486
HP0621	HP0862	HP0879	HP0703	HP0990	HP0321	HP0377	HP0854
HP1150	HP1451	HP0879	HP1248	HP0990	HP0663	HP0377	HP1409
HP0181	HP0807	HP0879	HP1274	HP0990	HP0727	HP0075	HP0075
HP1391	HP1041	HP0879	HP1379	HP0990	HP0909	HP0073	HP0067
HP0061	HP0066	HP0879	HP1422	HP0990	HP1213	HP0073	HP0232
HP0061	HP0978	HP0879	HP0012	HP0990	HP1327	HP0073	HP0705
HP0061	HP1409	HP0879	HP0116	HP0990	HP1333	HP0762	HP0272
HP1390	HP0118	HP0879	HP0178	HP0990	HP1345	HP0762	HP0506
HP1390	HP0120	HP0879	HP0275	HP1046	HP0162	HP0762	HP0655

HP1390	HP0154	HP0879	HP0281	HP1046	HP0182	HP0762	HP1409
HP1390	HP0325	HP0879	HP0321	HP1046	HP0220	HP0156	HP0156
HP1390	HP0351	HP0879	HP0483	HP1046	HP0509	HP0452	HP0109
HP1390	HP0528	HP0879	HP0578	HP1046	HP0583	HP0452	HP0155
HP1390	HP0751	HP0879	HP0639	HP1046	HP0746	HP0452	HP0278
HP1390	HP0809	HP0879	HP0666	HP1046	HP0750	HP0452	HP0705
HP1390	HP0816	HP0879	HP0699	HP1046	HP0760	HP0452	HP1282
1-Bait ORF	2-Prey ORF	1-Bait ORF	2-Prey ORF	1-Bait ORF	2-Prey ORF	1-Bait ORF	2-Prey ORF
HP1390	HP1012	HP0879	HP0735	HP1046	HP1024	HP0452	HP1409
HP1390	HP1081	HP0879	HP0821	HP1046	HP1197	HP1072	HP0096
HP1390	HP1188	HP0879	HP1012	HP1046	HP1312	HP1072	HP0792
HP1390	HP1379	HP0879	HP1160	HP1046	HP1464	HP1072	HP1321
HP1390	HP1486	HP0879	HP1299	HP1046	HP1488	HP1072	HP1409
HP1390	HP1513	HP0879	HP1374	HP1045	HP0325	HP1072	HP0050
HP0838	HP1409	HP0879	HP1459	HP1045	HP0750	HP1072	HP0231
HP1033	HP0599	HP0879	HP1513	HP1045	HP1205	HP1072	HP0263
HP1033	HP1513	HP0879	HP1567	HP0870	HP0317	HP1072	HP0705
HP1033	HP0651	HP1238	HP1238	HP0870	HP0488	HP1072	HP0836
HP1033	HP1105	HP1238	HP0655	HP0870	HP0595	HP1072	HP1430
HP0602	HP1402	HP1015	HP1521	HP0962	HP0617	HP1255	HP0687
HP0608	HP0175	HP0167	HP1035	HP0962	HP0621	HP1255	HP0969
HP0608	HP0589	HP1014	HP1014	HP0962	HP0655	HP1255	HP0969
HP0608	HP0626	HP1014	HP1409	HP0962	HP0750	HP1255	HP1072
HP0608	HP0919	HP0047	HP0047	HP0962	HP0996	HP1255	HP1077
HP0232	HP0605	HP0047	HP0048	HP0962	HP1019	HP1255	HP1114
HP0849	HP0056	HP0047	HP0695	HP0962	HP1024	HP1255	HP1290
HP0849	HP0066	HP1497	HP1074	HP0962	HP1025	HP1255	HP1550
HP0849	HP0109	HP1496	HP0769	HP0962	HP1188	HP0978	HP0979
HP0849	HP0116	HP0045	HP0045	HP0962	HP1274	HP0978	HP1583
HP0849	HP0132	HP0045	HP1409	HP0962	HP1353	HP0753	HP0030
HP0849	HP0197	HP0601	HP0547	HP0962	HP1379	HP0753	HP0033
HP0849	HP0213	HP0601	HP0753	HP0962	HP1409	HP0753	HP0115
HP0849	HP0354	HP0601	HP1154	HP0962	HP1478	HP0753	HP0197
HP0849	HP0370	HP0601	HP1377	HP0194	HP0592	HP0753	HP0492
HP0849	HP0373	HP0601	HP1409	HP0194	HP1377	HP0753	HP0747
HP0849	HP0417	HP1259	HP0006	HP0194	HP1488	HP0753	HP1035
HP0849	HP0452	HP1259	HP0025	HP0194	HP1489	HP0753	HP1098
HP0849	HP0466	HP1259	HP0025	HP0042	HP0017	HP0753	HP1274
HP0849	HP0476	HP1259	HP0026	HP0042	HP0051	HP0753	HP1454
HP0849	HP0512	HP1259	HP0033	HP0042	HP0054	HP0753	HP1485
HP0849	HP0539	HP1259	HP0212	HP0042	HP0278	HP0753	HP1523
HP0849	HP0569	HP1259	HP0231	HP0042	HP0381	HP0979	HP0977
HP0849	HP0570	HP1259	HP0252	HP0042	HP0419	HP0979	HP0979
HP0849	HP0583	HP1259	HP0280	HP0042	HP0723	HP0979	HP1278
HP0849	HP0593	HP1259	HP0317	HP0042	HP1133	HP0614	HP0614
HP0849	HP0618	HP1259	HP0354	HP0042	HP1318	HP0739	HP0016
HP0849	HP0621	HP1259	HP0405	HP0042	HP1392	HP0739	HP0379
HP0849	HP0717	HP1259	HP0585	HP1493	HP0033	HP0739	HP0453
HP0849	HP0760	HP1259	HP0615	HP1493	HP0043	HP0739	HP0527
HP0849	HP0971	HP1259	HP0643	HP1493	HP0051	HP0739	HP0547
HP0849	HP1037	HP1259	HP0705	HP1493	HP0116	HP0739	HP0621

HP0849	HP1041	HP1259	HP0779	HP1493	HP0281	HP0739	HP0655
HP0849	HP1048	HP1259	HP0792	HP1493	HP0435	HP0739	HP0687
HP0849	HP1069	HP1259	HP0830	HP1493	HP0483	HP0739	HP0810
HP0849	HP1084	HP1259	HP0862	HP1493	HP0501	HP0739	HP1056
HP0849	HP1129	HP1259	HP0965	HP1493	HP0669	HP0739	HP1157
HP0849	HP1132	HP1259	HP1012	HP1493	HP0841	HP0739	HP1279
HP0849	HP1213	HP1259	HP1232	HP1493	HP0977	HP0739	HP1357
HP0849	HP1299	HP1259	HP1259	HP1493	HP1002	HP1025	HP0668
HP0849	HP1332	HP1259	HP1299	HP1493	HP1025	HP1025	HP1025
1-Bait ORF	2-Prey ORF	1-Bait ORF	2-Prey ORF	1-Bait ORF	2-Prey ORF	1-Bait ORF	2-Prey ORF
HP0849	HP1374	HP1259	HP1342	HP1493	HP1138	HP1025	HP1114
HP0849	HP1379	HP1259	HP1411	HP1493	HP1198	HP1145	HP0182
HP0849	HP1393	HP1259	HP1422	HP1493	HP1350	HP1145	HP0289
HP0849	HP1400	HP1259	HP1430	HP1493	HP1411	HP1145	HP0400
HP0849	HP1452	HP0962	HP0030	HP1493	HP1533	HP1145	HP0550
HP0849	HP1489	HP0962	HP0088	HP0862	HP0607	HP1145	HP0621
HP0849	HP1493	HP0962	HP0111	HP0862	HP0621	HP1145	HP0669
HP0849	HP1553	HP0962	HP0244	HP0862	HP0791	HP1145	HP0690
HP1015	HP0299	HP0962	HP0285	HP0862	HP1474	HP1145	HP0705
HP1015	HP0547	HP0962	HP0410	HP0402	HP0825	HP1145	HP1010
HP1015	HP0607	HP0962	HP0426	HP0402	HP1130	HP0177	HP1409
HP1015	HP0687	HP0962	HP0490	HP0402	HP1234	HP0177	HP1508
HP1015	HP1435	HP0962	HP0528	HP0402	HP1478	HP0177	HP1550
HP1015	HP1490	HP0962	HP0537	HP1255	HP0607	HP0291	HP0279
HP0291	HP0291	HP1114	HP0919	HP1236	HP1148	HP0016	HP0791
HP0291	HP1409	HP0481	HP0281	HP1236	HP1263	HP0016	HP0969
HP0291	HP1541	HP0481	HP0298	HP0909	HP0587	HP0016	HP1017
HP0291	HP1550	HP0481	HP0416	HP0909	HP0607	HP0016	HP1183
HP0874	HP0875	HP0481	HP0421	HP0909	HP1081	HP0016	HP1267
HP1382	HP0025	HP0481	HP0494	HP0909	HP1521	HP0016	HP1450
HP1382	HP0182	HP0481	HP0645	HP0909	HP1561	HP0016	HP1490
HP1382	HP0269	HP0481	HP0736	HP1478	HP1478	HP1559	HP0010
HP1382	HP0317	HP0481	HP0741	HP1231	HP1247	HP1559	HP0056
HP1382	HP0705	HP0481	HP0779	HP0262	HP0355	HP1559	HP0087
HP1382	HP0896	HP0481	HP0971	HP0262	HP1318	HP1559	HP0116
HP1382	HP1142	HP0481	HP1000	HP1230	HP1230	HP1559	HP0116
HP1382	HP1182	HP0481	HP1025	HP1230	HP1529	HP1559	HP0116
HP1382	HP1237	HP0481	HP1266	HP0263	HP0056	HP1559	HP0120
HP1382	HP1243	HP0481	HP1406	HP0263	HP0486	HP1559	HP0132
HP1382	HP1342	HP0481	HP1435	HP0263	HP0605	HP1559	HP0145
HP0150	HP1037	HP0481	HP1513	HP0263	HP0779	HP1559	HP0355
HP0150	HP1067	HP1118	HP0822	HP0263	HP0792	HP1559	HP0364
HP0150	HP1198	HP0149	HP0103	HP0263	HP1238	HP1559	HP0379
HP0150	HP1371	HP0149	HP0196	HP0263	HP1325	HP1559	HP0406
HP0150	HP1409	HP0149	HP0331	HP0263	HP1332	HP1559	HP0466
HP0150	HP0449	HP0149	HP0527	HP0263	HP1489	HP1559	HP0488
HP0294	HP0100	HP0149	HP0547	HP0263	HP1513	HP1559	HP0589
HP0294	HP0289	HP0149	HP0693	HP0224	HP0250	HP1559	HP0606
HP0294	HP0377	HP0149	HP0775	HP0224	HP0920	HP1559	HP0615
HP0294	HP0399	HP0149	HP1034	HP0224	HP1076	HP1559	HP0621
HP0294	HP1318	HP0149	HP1079	HP0224	HP1198	HP1559	HP0660

HP0294	HP1409	HP0149	HP1115	HP0109	HP0101	HP1559	HP0663
HP0822	HP0651	HP0149	HP1248	HP0109	HP0488	HP1559	HP0669
HP0822	HP0725	HP0149	HP1332	HP0261	HP0281	HP1559	HP0680
HP0822	HP0822	HP0028	HP0214	HP0261	HP0537	HP1559	HP0710
HP0944	HP0033	HP0028	HP0354	HP0261	HP0583	HP1559	HP0780
HP0944	HP0224	HP0028	HP0527	HP0261	HP0605	HP1559	HP0795
HP0944	HP0695	HP0028	HP0547	HP0261	HP0632	HP1559	HP0817
HP0944	HP0944	HP0028	HP0607	HP0261	HP0655	HP1559	HP0858
HP0944	HP1318	HP0028	HP0791	HP0261	HP0750	HP1559	HP0929
HP0944	HP1529	HP0028	HP0969	HP0261	HP0887	HP1559	HP1026
HP0823	HP0100	HP0028	HP1041	HP0261	HP1019	HP1559	HP1041
1-Bait ORF	2-Prey ORF	1-Bait ORF	2-Prey ORF	1-Bait ORF	2-Prey ORF	1-Bait ORF	2-Prey ORF
HP0823	HP0255	HP0028	HP1072	HP0261	HP1124	HP1559	HP1075
HP0823	HP0352	HP0028	HP1222	HP0261	HP1274	HP1559	HP1116
HP0823	HP0488	HP0028	HP1450	HP0261	HP1350	HP1559	HP1143
HP0823	HP0919	HP0028	HP1470	HP0261	HP1489	HP1559	HP1187
HP0823	HP0969	HP0028	HP1503	HP0261	HP1513	HP1559	HP1207
HP0823	HP1024	HP0028	HP1550	HP0261	HP1517	HP1559	HP1236
HP0823	HP1116	HP0821	HP0705	HP0261	HP1543	HP1559	HP1266
HP0823	HP1409	HP0821	HP0821	HP0902	HP0588	HP1559	HP1274
HP0947	HP0096	HP0821	HP1114	HP0902	HP0887	HP1559	HP1325
HP0947	HP0116	HP0821	HP1409	HP0902	HP1409	HP1559	HP1393
HP0947	HP0569	HP0389	HP0696	HP0016	HP0016	HP1559	HP1434
HP0947	HP0621	HP0389	HP1262	HP0016	HP0038	HP1559	HP1452
HP0947	HP1012	HP0389	HP1400	HP0016	HP0228	HP1559	HP1453
HP0947	HP1205	HP0268	HP1198	HP0016	HP0439	HP1559	HP1470
HP0947	HP1373	HP1236	HP0026	HP0016	HP0687	HP1559	HP1472
HP1114	HP0651	HP1236	HP0347	HP0016	HP0697	HP1559	HP1479
HP1114	HP0705	HP1236	HP0355	HP0016	HP0759	HP1559	HP1489
HP1559	HP1493	HP1246	HP0326	HP1489	HP1489	HP0806	HP0134
HP0108	HP1399	HP1246	HP0407	HP0391	HP0099	HP0928	HP0928
HP0108	HP1541	HP1246	HP0886	HP0391	HP0392	HP0928	HP1409
HP0909	HP0996	HP1246	HP1035	HP1000	HP1409	HP1204	HP0514
HP0909	HP1041	HP1246	HP1244	HP0031	HP0006	HP1324	HP0010
HP0909	HP1081	HP1246	HP1460	HP0031	HP0066	HP0115	HP0317
HP0909	HP1241	HP0035	HP0035	HP0031	HP0281	HP0115	HP0753
HP0909	HP1256	HP1245	HP0650	HP0031	HP1041	HP0115	HP1157
HP0909	HP1321	HP1245	HP0717	HP0031	HP1513	HP1334	HP1329
HP1312	HP0083	HP1245	HP0816	HP0031	HP1567	HP1334	HP1409
HP1312	HP0282	HP1245	HP1024	HP0705	HP0254	HP0002	HP0002
HP1312	HP0413	HP1245	HP1523	HP0705	HP1406	HP0002	HP1200
HP1312	HP0705	HP0399	HP0399	HP0705	HP1541	HP0002	HP1409
HP1312	HP1046	HP0399	HP0621	HP0032	HP0032	HP0002	HP1451
HP1312	HP1316	HP0399	HP1048	HP0274	HP0066	HP0124	HP0377
HP1312	HP1409	HP0399	HP1430	HP0274	HP0518	HP0124	HP1409
HP1312	HP1430	HP1244	HP0857	HP0274	HP0951	HP0242	HP0242
HP1312	HP1523	HP1244	HP1246	HP0274	HP1294	HP0001	HP0050
HP0954	HP0045	HP0276	HP1263	HP1482	HP0102	HP0001	HP0355
HP0954	HP0466	HP0276	HP0012	HP1482	HP0259	HP0001	HP0792
HP0712	HP0152	HP0276	HP1489	HP1482	HP0466	HP0243	HP1409
HP0712	HP0197	HP0340	HP0011	HP1482	HP0489	HP1338	HP1298

HP0712	HP0278	HP0340	HP0096	HP1482	HP0645	HP1338	HP1338
HP0712	HP0281	HP0340	HP0231	HP1482	HP0760	HP1338	HP1409
HP0712	HP0662	HP0340	HP0340	HP1482	HP1115	HP1338	HP1523
HP0712	HP0714	HP0340	HP0695	HP1482	HP1369	HP0249	HP0012
HP0712	HP0736	HP0340	HP0730	HP0073	HP0073	HP0249	HP0099
HP0712	HP0836	HP0340	HP0821	HP0073	HP0232	HP0249	HP0174
HP0712	HP0850	HP0340	HP0834	HP0073	HP0259	HP0249	HP0214
HP0712	HP1160	HP0340	HP1088	HP1449	HP0615	HP0249	HP0415
HP0712	HP1470	HP0340	HP1138	HP1449	HP1019	HP0249	HP0527
HP0712	HP1489	HP0340	HP1198	HP1449	HP1332	HP0249	HP0547
HP0712	HP1513	HP0340	HP1274	HP1202	HP1068	HP0249	HP0610
HP0100	HP0123	HP0340	HP1362	HP1322	HP0013	HP0249	HP0787
HP0100	HP0132	HP0950	HP0030	HP1322	HP0649	HP0249	HP0922
1-Bait ORF	2-Prey ORF	1-Bait ORF	2-Prey ORF	1-Bait-ORF	2-Prey ORF	1-Bait-ORF	2-Prey O
HP0100	HP0278	HP0950	HP0116	HP1322	HP1488	HP0249	HP0969
HP0100	HP0585	HP0950	HP0192	HP0113	HP1041	HP0249	HP1041
HP0100	HP0617	HP0950	HP0304	HP1200	HP1037	HP0249	HP1154
HP0100	HP0707	HP0950	HP0394	HP1200	HP1199	HP0249	HP1157
HP0100	HP0710	HP0950	HP0884	HP1563	HP0785	HP0249	HP1377
HP0100	HP0726	HP0950	HP1025	HP1563	HP1080	HP0249	HP1409
HP0100	HP0830	HP0950	HP1198	HP0800	HP0433	HP0249	HP1487
HP0100	HP0852	HP0950	HP1438	HP0800	HP0687	HP0249	HP1503
HP0100	HP0898	HP1247	HP1231	HP0800	HP0800	HP0249	HP1543
HP0100	HP0919	HP1247	HP1353	HP0800	HP0801	HP0591	HP0582
HP0100	HP1050	HP0951	HP0116	HP0800	HP0924	HP0591	HP0610
HP0100	HP1157	HP0951	HP1409	HP0800	HP1267	HP0591	HP0663
HP0100	HP1379	HP0951	HP1411	HP0800	HP1460	HP0368	HP0409
HP0100	HP1411	HP1489	HP0001	HP0353	HP0353	HP0368	HP0435
HP0100	HP1458	HP1489	HP0351	HP0353	HP0406	HP0368	HP0897
HP0105	HP0105	HP1489	HP0540	HP0353	HP1420	HP0368	HP1293
HP0105	HP1409	HP1489	HP0705	HP0801	HP0152	HP0368	HP1356
HP0837	HP0705	HP1489	HP0797	HP0801	HP0800	HP0368	HP1410
HP0837	HP0836	HP1489	HP0841	HP0801	HP1513	HP0005	HP0088
HP1246	HP0121	HP1489	HP0862	HP0806	HP1198	HP0005	HP0116
HP0005	HP0175	HP1537	HP1189	HP1414	HP0522	HP0136	HP0983
HP0005	HP0278	HP1537	HP1245	HP1414	HP0655	HP0136	HP1119
HP0005	HP0317	HP1537	HP1325	HP1414	HP1124	HP0136	HP1195
HP0005	HP0583	HP1537	HP1430	HP1413	HP1024	HP0136	HP1205
HP0005	HP0615	HP1537	HP1489	HP1413	HP1409	HP0136	HP1241
HP0005	HP0640	HP1537	HP1541	HP1413	HP1413	HP0136	HP1393
HP0005	HP0657	HP1286	HP0231	HP1533	HP0010	HP0136	HP1430
HP0005	HP0665	HP1286	HP0625	HP1533	HP0033	HP0136	HP1510
HP0005	HP0714	HP1286	HP0833	HP1533	HP0351	HP0136	HP1553
HP0005	HP0977	HP1286	HP0934	HP1533	HP0381	HP0379	HP0706
HP0005	HP1274	HP1286	HP1119	HP1533	HP0402	HP0137	HP0010
HP0005	HP1350	HP1286	HP1222	HP1533	HP0944	HP0137	HP0066
HP0005	HP1409	HP1286	HP1379	HP1533	HP1430	HP0137	HP0109
HP0005	HP1411	HP1286	HP1492	HP1224	HP0278	HP0137	HP0197
HP0247	HP0117	HP1411	HP0033	HP1224	HP0781	HP0137	HP0244
HP0247	HP0247	HP1411	HP0351	HP1224	HP0976	HP0137	HP0247
HP0247	HP1316	HP1411	HP0397	HP1224	HP1409	HP0137	HP0289

HP0247	HP1409	HP1411	HP0701	HP1224	HP1478	HP0137	HP0422
HP0247	HP1572	HP1411	HP0809	HP0134	HP1012	HP0137	HP0452
HP1411	HP0027	HP1411	HP1198	HP1223	HP0332	HP0137	HP0592
HP1411	HP0397	HP1411	HP1287	HP1223	HP0514	HP0137	HP0609
HP1411	HP1411	HP1411	HP1411	HP1223	HP0746	HP0137	HP0610
HP1411	HP0701	HP1411	HP1530	HP1223	HP0775	HP0137	HP0621
HP1411	HP0809	HP0935	HP0072	HP1223	HP1409	HP0137	HP0626
HP1411	HP1422	HP0935	HP0528	HP1102	HP0231	HP0137	HP0635
HP1411	HP1530	HP0935	HP0657	HP1102	HP0540	HP0137	HP0853
HP0482	HP0145	HP1530	HP1411	HP1102	HP0775	HP0137	HP0900
HP0482	HP0482	HP0797	HP0289	HP0495	HP0821	HP0137	HP0908
HP0482	HP1409	HP0797	HP0887	HP0495	HP1205	HP0137	HP0996
HP0241	HP0134	HP0797	HP1349	HP0132	HP0304	HP0137	HP1114
HP0241	HP0289	HP0933	HP0025	HP0132	HP0679	HP0137	HP1143
HP0241	HP0317	HP0933	HP0052	HP1464	HP1464	HP0137	HP1332
1-Bait ORF	2-Prey ORF	1-Bait ORF	2-Prey ORF	1-Bait ORF	2-Prey ORF	1-Bait ORF	2-Prey ORF
HP0241	HP0500	HP0933	HP0123	HP1464	HP1433	HP0137	HP1393
HP0241	HP0610	HP0933	HP0197	HP1464	HP1157	HP0137	HP1406
HP0241	HP0745	HP0933	HP0231	HP1464	HP0816	HP0137	HP1553
HP0241	HP0973	HP0933	HP0278	HP1464	HP0610	HP0372	HP0347
HP0241	HP1048	HP0933	HP0528	HP1464	HP0489	HP0372	HP0372
HP0241	HP1157	HP0933	HP0532	HP1464	HP0346	HP0010	HP0605
HP0241	HP1177	HP0933	HP0610	HP1464	HP0232	HP0010	HP0655
HP0241	HP1370	HP0933	HP0775	HP1464	HP0088	HP0010	HP1026
HP0241	HP1454	HP0933	HP0825	HP0011	HP0011	HP0010	HP1124
HP1570	HP0060	HP0933	HP0900	HP0011	HP1409	HP0010	HP1216
HP1570	HP0806	HP0933	HP1198	HP0496	HP0547	HP0371	HP0056
HP0448	HP0303	HP0933	HP1213	HP0136	HP0109	HP0371	HP0289
HP0448	HP0416	HP0933	HP1248	HP0136	HP0156	HP0371	HP0289
HP0819	HP0522	HP0938	HP0109	HP0136	HP0244	HP0371	HP0371
HP1537	HP0088	HP0938	HP0268	HP0136	HP0247	HP0371	HP0527
HP1537	HP0621	HP0938	HP0401	HP0136	HP0295	HP0371	HP0528
HP1537	HP0655	HP0938	HP0501	HP0136	HP0303	HP0371	HP0609
HP1537	HP0660	HP0938	HP0705	HP0136	HP0325	HP0371	HP0609
HP1537	HP0705	HP0938	HP0846	HP0136	HP0399	HP0371	HP0609
HP1537	HP0770	HP1414	HP0025	HP0136	HP0621	HP0371	HP0610
HP1537	HP0822	HP1414	HP0060	HP0136	HP0760	HP0371	HP0610
HP1537	HP0841	HP1414	HP0205	HP0136	HP0779	HP0371	HP0752
HP1537	HP1114	HP1414	HP0281	HP0136	HP0795	HP0371	HP0908
HP1122	HP0051	HP0406	HP1556	HP0406	HP0119	HP0975	HP0658
HP1122	HP0680	HP0287	HP0044	HP0406	HP0120	HP0975	HP0941
HP1122	HP0850	HP0287	HP0056	HP0406	HP0223	HP0975	HP1150
HP1122	HP1032	HP0287	HP0100	HP0406	HP0325	HP0975	HP1344
HP1122	HP1393	HP0287	HP0116	HP0406	HP0332	HP0975	HP1513
HP0634	HP0071	HP0287	HP0379	HP0406	HP0353		
HP0634	HP0278	HP0287	HP0466	HP0406	HP0399		
HP0634	HP0281	HP0287	HP0470	HP0406	HP0509		
HP0634	HP0285	HP0287	HP0488	HP0406	HP0514		
HP0634	HP0381	HP0287	HP0550	HP0406	HP0527		
HP0634	HP0480	HP0287	HP0605	HP0406	HP0555		
HP0634	HP0592	HP0287	HP0680	HP0406	HP0593		

HP0634	HP0609	HP0287	HP0792	HP0406	HP0621
HP0634	HP0645	HP0287	HP0977	HP0406	HP0655
HP0634	HP0655	HP0287	HP1045	HP0406	HP0795
HP0634	HP1177	HP0287	HP1069	HP0406	HP0797
HP0634	HP1394	HP0287	HP1116	HP0406	HP1024
HP0634	HP1489	HP0287	HP1216	HP0406	HP1030
HP0634	HP1513	HP0287	HP1274	HP0406	HP1048
HP0634	HP1540	HP0287	HP1430	HP0406	HP1069
HP0830	HP0736	HP0287	HP1470	HP0406	HP1114
HP0830	HP0975	HP0287	HP1479	HP0406	HP1188
HP0830	HP1012	HP0287	HP1489	HP0406	HP1195
HP0830	HP1411	HP0287	HP1556	HP0406	HP1274
HP0830	HP1430	HP0975	HP0036	HP0406	HP1341
HP0830	HP1489	HP0975	HP0449	HP0406	HP1430
HP0406	HP0109	HP0975	HP0528	HP0406	HP1489
HP0406	HP0118	HP0975	HP0552		

TABLE 2
SID@s Sequences

1-Bail ORF	2-SID nucleic sequence	3-SID proteic sequence
	SEQ ID #	Sequence
HP0338	1	2
	TGAAGAGGATGGGAATGAAAGTATGCGCTATGATTTTCAAGCGCTAAGGAGTTGCTAGAAATTGTGCCAAAAACACC AAAAAGCATCGCTGAAATCGTGGCTTTGAGAGAAACGCCCTGAAACACCCCTGATGCAACGATGGTTAAATTT TATCATCGCATGCTTGAGTGTATGATAATGGGCTAATTTCTAAAGAAAGGTATCTGCTGGTTCTTTGAAAGTAACA CGATTGGCCCCAAGCATTAAACCGGCTAGAAACACCCACAAAGCGGAAAGACCCCTTAGCCCTTGATTGATTA CATTTCGCTTTACGCTCGCGCATTTGCTGAAGAAACGCTAGCGGAGGCAAGGTGTAACCGCCCTTAACTAATGGG GCGTGGCGGTGGTGCCAGCGTGTCTTTATACGCTAAACACCATTTGTTTGAATTTATCGCAAAAGGCTATCAAT GATTTTCTACTACTAGTGGCGGATTTGGCTATCTTTACAAAGAAACGCTTCTTGGTGGCGCAGAACCGGGTG TCAGGCTGAAATTTGGCGTGGCAAGCTCTATGGCTGGGGGGTGTAGCTCATTTGTGCCAAGCGCACCGCAACA GGTTTGATCGCTAGTGAATCGCTATGGAACACCATTTAGGATTGACATGCGATCCGGTGGGGGCTTGGTGCAA ATCCCTTGCAATTGAACGCAATGTTTTAGGGCGGATTAAAGCGATCAGCGCTTCTAACTAGCCTTAGAAGATGAATAC AAGCCTAAGTGAGTCTGGATGAAGTATGCTACATGTATGCGACCGGAAAGACATGAATGAAATACAAAGA GACTTCGTTAGGGGGTTAGCCAAACCTTAAATGCTAAGGATGAATCTAATCTTAGGGGGCTTAGGTTTCTAA AGAAAGTAAAGGTTTGTGTTTATCAATATCAATAAGCCTTATCTGCTTTGATATCTTAAAAAAATTTTAAAAAATAG GGTTTAAAGCGTTCCTTCA	EEDGNESIAYDFSSAKELLELCQKHQK SIAEIVRLRENALKNHPDATM/KIYHAM LECYDNGANSKERYLPGSLKVTRLAPS IKTRLEKHPTSGKDPALALIDYISLYARAI AEENASGGKVVTAPTNGACAWPSVL LYAKNHLFENLSQKAINDELLTSAAGY LYKKNASLSGAEAGCQAEIGVASSMAA GGLAHLCCQATTQQVLIASEIAMEHHLG LTCDPVGGGLVQIPCIERNVNLGAIKASAS KLALEDEYKPKVSLDEVIATMYATGKD MNEKYKETSLGGLAKTLKC
HP0338	3	4
	GAGAGCAAGCGGTAAATCGTGGAACACGCTTGAAAAAGAGGGCATGAAATTGAGCGATTTAACGAAGAAGAA TTGAAAAATCATGTTTGAAGCGGAAGAGAAAGGCTTTTAGAACAAATCCAAACTAAGCATTTTAAAGAAAGTTTGGGAA AAGGGCGACAATGAGCAAGGAAATAGCGTAATTTCTGGTTTAAATGAATTTTTAGCGGAAAGAAATGAACGCTGGCT GTTAGCCCCACAGGCACACGAGAGGGTTTGTGATCGTGGCGTGGCTTTTTCGGTTTAAAGCATTGCGTTTCTATTTC TGATCACCTTTGTTGGTGATTGG	EQAVKIVEKRLKKEGKMLSDFNEEELKI MFEAEEKRLLEQIQTKHFKEVWEKGD NEQ GK
HP0339	5	6
	TGCGCGTGTAGAAACGATTTGTTGCTTTAAGAGAGTATCGTAAAGTTTGGAGAAAGCGTGGGGTTGTGCCGACT ATGGGGGCTTTACACAAAGGGCATCAAGCTTGATAGAAAGGAGTTTGAAGAAATTTCCACACGATAGTGAGCGT TTTTGTCAATCCACGCAATTTGGGGCTAACGAAGATTTAACGCTTACCCCTCGCCCTTAGAAAGGATTTGGCTTT ATGTGAAAAATTAGGCGTTAATGCGGTGTTTGTGCTAAATTTGGCGAAATGTATCCCTATGAAGCAGAGCAACGCC TGAAACTCTATGCTCCTAAATTTTATCTAGCTCTTTAGAGGGAG	RVLETIVALREYRKSLEESVGFVPTMG ALHKGHQSLIERSLKENSHITIVSVFVNP TQFGANEDFNAYPRPLEKDLALCEKLG VNAVFPKIGEMYPYEAEQRLKLYAPK FLSSSLEG

HP0339	7	ATTACCCCTAAAGCCAAAGTCTATTCCAGCAAGATAAAACGCCCAAGCCCATGAAGCGATCAGGCCCACT TCTATTATTTAGAGCCAAACGCTTTAAAGACTACCTTAAGCTGAAGATTAAGGCTCTATACCTTAATTTACAAC GCTTTTAGCTTCTCAATGCAAGACGCTCTTTTGAAGCCAAAGCGTGTGTGCTTGCAGAAAGGCGAGTTT AAAGCGAGTGGAGAAAGCTCTTTTATGCTATTATAAATTTAGCAATGACGATAAGGACAAATTTGCTCCCC AATTTGAAGAGAAATGACCCATTAAATAGAAATAGAGAGCAACGCCATGTTACAGAACCTCCAGCACGCTAT TCTGAAGCGAGCTTGATTAAAGTTTAGAAAGTTTAGGCATAGGCAGGCCAGCACCTACGCCCAACGATTTCCCT TTTACAAACAGAGACTAGATCAAGGTAGAAAAAGCAATCAGTCTTTAGAGAGCGCTTTTAAGGTGATAGAAAT TTTAGAAAGCATTTGAAGAAATCGTGGATCCAAATCAGCGCTTTACTACCCCTTATGGATAAATGAAGCTGGGAAAGAA AATAAAGCCGACTACAGCAAGTCTTAAGGACTTTTACTACCCCTTATGGATAAATGAAGCTGGGAAAGAA TATCATCTCTCAAAAGTGCATGAATAACCGGTCAATCATGCCCTAATGCGGTGGGAATAGTCAAAAAAATAG CCGTATGGGAGTTTATCGCTTGCAACAAATACCTAATGCAATATGTCAACAACTGAAAGCGCTAATGATGA AGCGGATCAAGAAATTGTGCGAAATGCGGAGGGAATGTTGCAAAATTCAGCAGAAACGGGCGTTTGTAGCT TGCAACAATTACCCCTGAATGCAAAAAACACCAATCGTTAAAAACACCCCTAACGCAAAAGAAACAATAGAGCGGT GAAATGCCCAGATG	8	LPKAKVYSSKNKNAQEAHEAIRPTSII LEPNALDYKPEELRLYTLIKRFLAS QMQDALFESQSVVACEKEGFKASGR KLLFDGYKILGNDDKOKLLPNLKEND PIKLEKLENAHVTEPPARYSEASLIKV LESIGIRPSTYAPTISLLQNRDYKVE KKQISALESAFKVIEILEKHFEEIVDSKF SASLEELDNIQNKADYQVVLKDFYY PFMDKIEAGKKNISQKVHEKTGQSCP KCGGELVKKNSRYGEFIACNNYPKCK YVKQTESANDEADQELCEKCGGEMV QKFSRNGAFLACNNYPECKNTKSLKN TPNAKETIEGVKCECGGDIALKRSKK GSFYGCNNYPKCNFLSNHKPINKRCE KCHYLMSEIRYRKKAHECIKCKERV LEEDNG
HP0339	9	TAGCGGTATCGCTACACACCGGAATGCAAGACGCTATCTCATTGTGCAGAGAGTGAATAATTTGACATCACCCCT TTTAAATGCGTGAGCGCTTATCCAGTAATAATAGAGACGCTAACTTGTGAGCATGGTTAAATTAGCGCAATCTT TGGCGTTAAATTTGGCTTGAAGCATCACAGATGGCTCTCTTTGCCCATTTAGCCACCATTTAGGAGCGAGCA TGATAGAAAGCATTTTCAATAAATCTTACAAACCCAGACAGCGCTTTTAGCATGGATTTTAAACGGATTTAA AAGCATGGTGAAGCCATCAAGCAAGCGTTTAGCCTTAGCGGAAGAGCCCAAGAAATCAATCCAAAGACTTTAG AAAAGCGAAGATTTTGCAGCGCTCTTATTGTTATTAGGATATCAAAAGGCGAAGCATTTGACTGAAACAATAT GAAAGCCTTACGCCCAACCTTGGCTTACCCCTAAATTTATAAGAAATTTAGGCCAAAGCATCAAAATCTTA	10	SGIATHTLEQDAISLCRRVNNFDITLLK CVSAYPSKIEDANLLSMVKLGEIFGVKF GLSDHTIGSLCPILATTLGASMIKHFIL NKSLQTPDSAFSMDFNFGFKSMVEAIK QSVLALGEEEEPRINPKTLEKRRFFARS LFVIKDIQKGEALTENNIALRPNLGLH PKFYKEILGOKASKFL
HP0339	11	TGCTTTGTGAGGGCTGAAGAGATGGGCGTTTTTGTATAGATTACCAGCAGATTTGGCCAGACAGGAATTG AAAAATCCAGGCTTACCCAGCGCAAGAAATTAAGGCAGTTGATCAGAGATGGGCTGTGAGGTTGCAAACTTCTG CCATTCCCTTATCTACTACTTGGATATTTAGGGAATAAAGCAAGCACTCTTTGCTGAAAGCTGAAACAATG CACAAACCATCACAAACCAACCGCAACCCAGCAACCAACCGGACCATCAAAACCAAGCTTAGCCAAATTTAGAGCAA TCTCTAGGGATTTAGGAAACTATTGGATCTATCCCAACATACGCTAGTCAGGGTGTCTAATAGCCTTTGGTGGTG GATGTGGGGAAGAAATCGGTATCAGCGATAGCATGCTCTTGGTGGCTCAAAACATCGTTTAGCTTTAGGGCA AGTGGATTGAGCAAAATCCAAACAAACATAACGACAGCTATACGAAATATTATGAAAGTCATGCTTTTAGGGCG GGCGGACTAATGGGCGTATAATGGGTGAGTGTGGCGACATTGCCAGGGCATGCAAAATTTTCTTCGCAA ACGGGCTTGATAGGGCTAATCTACGGTTAGCGAGCTGAATGCTTTGATTAAAGAGCGGATTTCTTTGGATCGTGA GACTTTGGGTTAGGGAGTTTATTGAAAAAATATCTGTAGCGGTGATCGTCTTTGTTTAGTGGGAATCAGCTTAT CTATAAGAAAGGCTAGACAGAACCAATCAATCAATACGGTATTAGGTGAGTTTGAATCTTGGGCTAGTTCTCT TTATAAGATTCTTATATCCCTAACCTCTTTTGGCTCAAGGATTAC	12	SLCRAEEDGAFVIDYQTSLARQELKN PGFTQAQELRQLRDRGAVRLQTSAPL SYLDILGNKTATLLRESLKNNAQPSQ PNAQPPQNGSPSNQALANLEQSLGIL GKLLDSQYASQGVKPLVVDVGKEQ IGITDSMLLVAQNVLALGQVDLSKIQQ NNNEQLYENIMKVMMLGAGGTNGAYN GVSVDIATGMQNFSSQTGLIGANSTV SELNALIKSGISLDRETGLGSFIEKNIC SGASSCFSGNQLYKKGLDRITININTVL GQFESSASSLYKISYIPNLFSLKDY
HP0339	13	TCAATCGCTCTATAAGGGCGGCAACGATTACATTGACATGTTAAGACAGCGCACACTTATTCTGTCATAACAGT TCGCTTCTTTAGAGCGTTAAAAAGGATTAAATCTCAAGTCAAAACGCTTTTATACATGCCCCCTTTTCTAACCG CCTATTGAGCGGGCAAGCGTTGGATTAGAAAGAACTAAGAGCGGTTTGAAGCGTGAAGCGTGGCCACTGATGGC TTGAGTTCTAACATTTCTGCTGAGCCTTTTAGACGAATTAAGAGCGTTTTTGTCCACCCATAACATGCCGTTATTAGAA TAGCTAAATAGCCCTTTTAGGGCGGCACTAGGCTAGGCTAAAGCTTTAGCTTTGAATAATGGCGAGATAGAAAGCC AACAAAGGGCGGATTGAGCGTGTGTTTAAATGAAAAATTCATAAGAGCAAGCGGATTTTGCAATTTT	14	KSLYKGANDYDMFKDHTLHVHNOFA SLEALKRIKSQVKNAFLITCPFSNRLLS GQALDLERTKEAGLSVSVATDGLSSNI SLSLLDELRAFLTTHNMPLELAKIALLG ATRHGAKALALNNGEIANKRADLSVF GFNEKFTKEQAILQF

DIRECTOR **SECRETARY**

HP0339	21	TCAGGTCGGATCGCATTTAGACATCGCCCTACGATTATTGAATTAGTCGCCCTAAAGGCTTCAATTCGTGAGTTT TGGGAAGCCTTTATTTCTAACAAATACAAACCCCAAGCCCAATACCGCTAGGCTATGAGCGGATCG CTACCAAGAGATTATTTTATAACCCCAAGTTGGGTTAAGGTAATTTGAACGAAGCCCTAAAGAGCCAAAGGATAAAC AAACGACAAATAGAGCTTCTAAGTTTATCAGCAATTAGAATCTTTGAAGCCCTTAGTTATTACTTGTCTCTATCA TGGGGCTAATCTTAAAGATTGACAACTAGGTTTTTATCCATTAAAGCATGATTTTGTCTACATAATAGGATTTTA ATTATATAAGGACAAATGGCATGCCAATAGGGCGTTGTTTTATTAGCGGCAAGCGCTAGCTGATGATAATAG AAAAGATTGAAACATAAAATCCAAATAAACCACCAAAAGCATAAACGCCCAAACTAGCGGTGATTTTAGTGG GAAAGATCCGCTAGTACCTTATGCAATATGAAGATCAAGCATCGAAAGGGTGGCATGGATTTTGACTTA AAACCCCTCCAAGAAATATTACTGAAGCCAAATTGCTATCTTGAATTAAGATTACAATACCGATCAAAACATTTTCAG GCGTTTAGTCCAGCTCCCTTTGCCAGACACATTGATACTAAATGATTTAGAAGCCATTGACCCAAACAAAGATG TGGATGGTTTCCACCCCTTAATATCGGTAACTCTGCACTCAAAAGAAATCGTTCTGCCAGCCACCCCTATGGGC GTGATGCGGCTTTTAGAGCATTACCATATTGAATCAAGGGTAAGGATGTGGCGATTATTGGAGCGAGCAATATCAT TGGCAAAACCT	22	QVGSGLDIAPTIELVAPKGFQFVSFGK PLFSNNTTNPSPHPNYALGYEAIATKD YFYNPSLGLRNLNESPKEPKDKQNDKI EASKFYQQLSLSKALSYYLLYHGANKL D
HP0339	23	TGGAAATCAACGCTTATCAACACTATTCTAGGCATTAGATCAGACTATAATTTAAAGCACAAACAAATAATATCCCA TACCACGACAAATGTTATACCAACGCAAGCAATGGGAGTTGCTCTAACCTATTCAACTACCCACCTAGATTAAAC GCAACGACCTTTTAAATCTATCAATTTTTCACAAAACTGCACTCCAATCTATTGAAAAAATCTTTTGAATAA AACCTACGAACACCTAAGTGATGGACAAACAGCGCTTAAGATTGATTAGCTCTTAGCCACCCACCCCAATTAAT TATTATGGATGAACCAAGAACTAGTTTAGAGCAAAACGCTCTTATAAGACTATCAATCTCATAGCTTGGCGAACAC CCAACAACTTACAAGTATCATCGCCACTCATGATCTGATT	24	GKSTLINTILGIRSDYNFKAQNNNIPYH DNVIPQRKQLGVSNLNFNYPRLNAND LFKFYQFFHKNCPTNLFKNLLNKTYE HLSDGQKQRLKIDLALSHHPQLIMDEP ETSLEQNALIRLSNLISLRNTQQLTSIA THDLI
HP0339	25	TGAAACTTTAGCGCTCTTTAGGTAAAGCCCTTTGAGGAGTTGAATTTAGAGGTTATTTTAAACCAGCTTTCTAA TGCGGCTGAGCGGTAAACAGCCCTATGAATTAGATGGCTTAGAATGAACGAAGTGGCTTTTAAATAATGCGAGAC CATTTCCCTAGCATTGATTCATAGATAAATCCACGCTATTGATGCAATTAATCCCTGAGTTTGATAATATCCGCT TATTGGATAGCTCAAAACGCGCTTTGGGCGTATTAGGCACTGGAGTTATACCCAAATGCCCTGGGCTAGTTAT GTGAATTTAACGCAAGGCGCTATGGAGTGTGCATGAATGAGGGCGTATTTCTCATCGGTGGTGGTGGAGCAG GCACTGATATTGGTGGGAGCGGCTGTTAGGCGTTTAAAGTGGAGGGAATAACAACCCATTAGCATCGGGAA AAATTTGTTGCTAGGGCTAATAGCGTTACTGGAATTAGTCTAGCGGATGCTGTATCGTGGATGCGGCTTTCGGA TACTAGCCGGGAGCGGTGATAGAAATTGAAGAAATGAGTTTAAAGCTTTTGAAGTGAATAGCGCTTTAGAAAC ATGCCAAACACCTTTACAAAGGCAAGAACTTTCCGGAATAATGGCGTGCATTTCTCCAAATAGTCAGAAATGGCA AGCTGATTGCTTTTAGGAGCGTGAAAAAATAGTTGAATCAAAACCTGCATTAAAGGATTAAAGAAATGCTCAAAA AAGTTGTTATTGCTTTTGTATTTTGTCTTACAGCTTAGCGGCTGAAGAAACAAATCAAGCCCAAAAAACAC	26	KLALSLGKAPLRLSLNLEGFNQLSNA WSGNKPYELEWLRMNEVALKMRDHF PSIDFIDKFPRLMQLIPEFDNIRLLDSS KTRFGAYLGTGGYTQMPGASVYVFNFA GAMGVMNEGRISSSVVVGAGTDIGG GASVLGVLGGNNNPISIGNKCLLGAN SVTGISLGDGCIVDAGVAILAGSVIEE NEFKLLEVNSALEKHANNLYKGKELS GKNGVHFRSNSQNGKLIAFRSVKKIEL NQNLH
HP0339	27	CCTTTTAAACCATGCTAAAAAATCAAGCTTGAATGGGTGGAGATTGAGGGTTGGAGCATTGGATAAAGTGAT TTATTTAGATCAAGCCCATAGGCAAAACCCACGAAGCAACCTGCCACTTACACGGGAGTGATGGATGAATCA GGATTTTATTGGCGAGCAAAAGAGCTAAATTTTAGGCTATAGTCCGAGCCGTTTAGCTTTAATGTTAAAGGAG GGCGGTGCGAGAAATGCCAAGGCGATGGGACATTAAATAGAAATGCACTTTTGCCTGATGTGTAGTCCCAATGC GATAGCTGAAGGCGCTAAATACAAACCCCAACTTGAATTTTGTAAATCCCTAAATCGCCGTGAAGTAAACGCTTATGGA GAACATGAGCGGTGAAGAGGCTTATGAATTTTGTAAATCCCTAAATCGCCGTGAAGTAAACGCTTATGGA TGTGGCTTAGGCTATATCACTTTAGGCAAAACGCTACGACTTAAAGTGGGGGAGGCTCAAGGATCAATTAG CTAAGAATTGAGTAAAGACACAGGCAACCCCTTATATTTTAGATGAGCCTACTACCGGTTGCAATTTGAAG ACGTGAATCATCTTTTACAAGCTTTGCAATCTTTAGTGGCGTTAGGCAATTTCTATGCTAGTGATTGAGCATAATTTAGA CATTATCAAAACGCTGACTACATTATAGACAT	28	LNHAKKTQSLNGVEIVGLEHLDKVIYL DQAPIGKTPRSNPATYTGVMDEIRILFA EQKEAKILGYASRFSFNKGGRCCEK CGDGIKIEMHFLPDVLVQCDSCCKGAK YNPQTLEIKVKGKSIADVLNMSVEEAY EFFAKFPKIAVKLKTLMDEVGLGYITLQ NATTLSSGGEAQRIKAKELSKKDTGKT LYILDEPTTGLHFEDVNHLLQVLHSLVA LGNSMLVIEHNLDIKNAOYIID

HP0339	37	GCGTGGATAAGACGGCTTTTAGTACTCTTAATGGCTTAGGGTCTTCTCGTTCGGGCTTGAACGAAAAAGGA GGGATCATGCTCATGCTGACGCTGAATGAAGTTGATCAAAATGGCGAATCACTTTTAGGGATAATGAAGCCCA AATTCAAGCAGCGCGTTAGCTTTAGTGGTTTAGCGAACCTAAATCTTAAATAATAGGGCAAACTTTATAC CTATCAGGGCGAAGCGTTGATCAAGTCTGACTCTGGTGGTTAAGGCAATACATGCTAGAAAAAGCAATGTCA ATCGGTGCGCGAGATGAGCGCTTGTGATGAATCAACCGCTTTTGGACATGATTCTAAAGTGTAAACCCAC CAAGACGACATGAACGCTGAAGCGATCAACAACTCGTGCAAAAGCTTAAAGTGTAAATCCATAG GAGGTTTTACGCAATACCTTAACCTCCTAATGACGCTTTTAAAGCTTAAATCTTTTATATAGGATTAGTTT TAAAGAGTTTAAAGAAATTAATGCCCTTTCTTTGTAATCGCTGCAAAAGCTTAAAGTGTAAATCCATAGTTT TCGTAGTTTATAGCGCTAAGTGTCCCAATTTGATTGTTATGTTTAAAGCTTAAAGTGTAAATCCATAGTTT GTGGTATTCTGAAGCAAGTGTCCCAATTTGATTGTTATGTTTAAAGCTTAAAGTGTAAATCCATAGTTT CATTAAAGTTTGAAGCGCTATAGTGTCCCTGCTGTAATGATTAAAGTGTCCATTTGTTCTAAATCCCTTAA TGTTTTTATGCCCCAATCAAGTTTTTATGATACCCACTGATTATAGCGTCCATTTAAGATAGAGCCATTCCTAA GCTTGTAATAATTTCTTCTGCTTCCACTAACTAGGGTGAAGAGCAAGTCACTTTTAAAGCTTTGTATAGGCGG TGTGTG	38	IVDKDGLVLTNGFRVLSRSGLEKGG MLMPDAEIEVDQNGGITFRDNEAQIA GALVVSFSEPKNLKKGQNLTYQGE GVHQVSDSGALRQYMLEKSNVNAVR MSALIEINRFLDMYSKVLKTHQDDMNA EAINKLAACA
HP0339	39	CTTTAATGCAAGCAGGATTTTAGGGGCTTAGCCAAAGCAATTTGGCTTCACTTACAACAAAGCCCTTAAT GGTAGCGATTCCCAACAGGCTACCAAGCTTAGCGGCCGGTTATTACACTAAACGCGCTAATGCACTA CCCAAGCGCCCTTGAAAGCATACCCGCTGAGCGACAATTGGATCAGGCAATGCGCAATACACCTACCCACCCAG CTCGGCAGTCTATTATTAGCGGATAGCATATTGCTAATGGCATCACCGCTTCTATGATTTTTCAGGCATGCAAAA TTTCGCCAATAAAGCCGCTAACTGACAGGCACTTCAAGCTATAGCCAGATGCAAGATGCGATCAATACGGGAAA GCTTGTCTAGTAACACCGTAGCTGATGGGATTTCACTACCAATTTGGTCCCGCTATTGGATTAAACAAACAA GGTTTGAATTTCTGCTAGTATGGGGGCAATTTGATGCTAATCATCAACCCCAATTAACCCCGCAACA AGCCCAACAGAGCAAAAGTCAATCATGAACCACTAGAGCAAGCCCAACCCCGCCCGGCAATAAAC AGGATTTAGCCAAACCTATTCCCGCACGCAAACTTAAATGGCTT	40	LMQAGILGGLANEKQFGFTYNKAPNG SDSQGYQSFSGPGYTKNGANGTT QAPLKALPAGATIGSGNGQYTYHPSSA VYLLADSIANGITASMIFSGMQNFANK AAKLTGTSSYSQMDAINYGESLLSNT VAYGDFITNVVAPYLDLNNKGLNPLPS YGGQLNGANHQTPLTPQQAQEQK VIMNQLAQATNAPTQAQINRILANPYS TAKTLMA
HP0339	41	GGCGTTGTTTCAAAAGCATGGCAACAAAGATCAAGAGATTTGAAGCAATTTGAAGTTCATTATCAAGTGGG GGATTTCAAGGAATGAAAAATCCCAATTTTATAGAGATTTTAAACCCCTATCGCTCAAGAAAGTGATG CATTAGCCCTGGAGTTTGGCACTATTATAGAAACAAAGCTTTTATAGAGGATTTGAATAGCGAAGTGTGCGAT TTATTGATAAGCATTAATAAATCATGTTTCCATATCGCTTACGCGGCTTGCATAGCGAATTTGCAAGTGTGCGG AGTTTTTAGGGATCATTAAGTATTTAAGAGCGTTGAAGGAGTCC	42	ALFOKHGKNQESLKQFEVYHYQSGG ISRNEKIQYFYNEILKTPAQEEVDALAL EFGTIEQKLFDRHNLNSEVMFIDKHY KNHVFHIAAALHSELQVLCEFLGIKYF KSVEGS
HP0339	43	AAAAACAATAAGGAATACCCATGGATATTGCAACGAATTTTACAAATTTTCAAAATAAGGCGATGCGCTTAT CTAGCATGCTTTAGTGCCCTAATGACGCTACCTTGTCTTTTACCAATGCGGCGATGTCGAATTTAAAGATATTTT ACCGGATTTGTCACGCGCTAGCATTCCTAGAGCGGCAAGCTCGCAATTTGTCATGCGCGGCGGCAAGCAT AACGATTTGAAAATGTCGGTTATACCGCAAGGCAACACACGCTTTTGAATGCTAGGGAATTTCTCTTTGGGGAT TATTTCAAGAAAGCGCATCTTGTGCGTGGGAATTTGAACC	44	KQKQIPMDIRNEFLQFFQNKGHAVYP SMPLVPNDATLLFTNAGMVQFKDIFTGI VPRPSIPRAASSQLCMRAGGKHNDLE NVGYTARHHTLFEMLGNFSGFDYFKE EAILFAWEFVT
HP0339	45	TCAAAGAAATCAAAAAGCTAACAGCACCTAAATAGCCAAAGGCGTTTTTAAAGCGCCAGATCGCCCTTATG GACACTGATGCACTATTGAACAAGCGCTTTGGAATTAGAAAAATTACAAGCTTTAGAAAAACACATAAAAAGGCG ATGGAACAAGACGCTTAATAGAAAGATCCCAACGCTTTTACAAAGAGCATTTGCCCTTATTGAGCGCGTTAAG AATTTAGAGAGGCTTCAACGCTTTAGAGCTCAAGAGCAACACGCTTTTCTACTCAAGAGCCTAACTC GCCCGTTTGTCTCTCACGATTTGATGAGCGCTTAAACGCTTGTGCGATCAGGTTTTAGAAAAACCAAGCCCA TAACC	46	KEIKKANSTLNSQRRFFNASQIRLMDT DALLKQSALELEKLALEKHIKKGMEQ ERLIEESQTLFQEHCPYLSGVKNLEE ASNALEVQEONNALFLLKEPKLARLLS RLDLSALNALCQOVLENQAHN

HP0339	47	GGATCAAGTGAGTGGCGTGTGCACACGATTGAATTGAGCTCTGATGATGTTGAAGCCATTAAAGATCAGGTGA GAGAAATTTCTAGCGCTTTAAGGAGCGTCTTGAAGAAGTGAAGCCGATTGGCTAAAGACATTGTGCAAAATGGC GTGGTCTTACCGCGGTGGGCTTTGATTAAAGCTTAGACAGTATTGAGCGATATGGTTAACTCCCTGTGTA TGTTGGCGATGAGCCTTTATTGGCGTGGCCAAAGGCACAGAGAGCCATACAAGATTGGATTACTCAGCCGT GTGGTTTTAGTGAATAATGCATGCGTTTTATTAAATCCCTTTAGGATTCTTATTTTATTTTATTTT GATTTAAGGGTAGTTCTTATATCAGCGACAGGATTAAATGCCCTGATGACGCTAAACACAGCTTATTAGAC AACGTTCAAGCGTATTTTCAAGCCCAACATTAAGGAATTTCAAAAGAACGCTTGATTTAGAAGCTTTAAAC TAGAAACGCCGATTGAAAGAGCGTTTGAATAGTATTATCTTTAGAAATCCAAATGACCTACACCCCATTT CATGACTTCATTCATCAGTTTAGAAGACACGCGATTGCGTGTAGAAAGGCGCTTGAACGGTTTTGAACGC TATGGCCTTGTCTCACAAACCAAGCCATAGGCATTGCGTGTAGAAAGGCGCTTGAACGGTTTTGAACGC TCACAAGCGGTGGCTTATAGCGTGATGATAGGCCAAATCAAGTCTTAGGCTTATAGGACTAATTTCAAGCAAG AATTAGTCGTGGATTCATTGTCCCAAGCGCTGAAATCAACATAGCGCATCAAGTGTCAACGAGCGGTAGACGG GATTTTGGAGCGGGGTGTTGTGGCGAAGTTTCAAGCATTGAAGATCATTACACCTATAAAGCGCGGTGCTGA AAACGCTTTTTTA	48	DQVSGLLHTIELSSDDVFEAIKDQVREI SSALRSVLEEVKPDIAKDIVCNGVVL GGGALIKGLDKYLSDMVKLPVYVGDEI LLAVAKGTGEAIQDLDLLSRVGFSE
HP0339	49	GGATGTGGATTGTCAACAGAGTGGCTTTGGAAGAAATTTAGCCCTAAACCATCGCTTTAAGCTTTAGCGCG GATAAATCTTTAACAGTGGCAAGCGGCGATTATTATGGGCAAAAGAACGGTTGAAGCGTTAAACCAACCC CCTTATAGAGTTTTAAGGTGGTAAATCACGCTCACCTGCTTTTGCAGCCTAAAGCATGGATAATCATCA AGAAACATTACAATCCATGCGTTATTGAACCAACCTAAAGACGCTATTGCAAAAGCCCTCAACCTCTACGCTCT TTTAAAGCCTTTAGAAATGAATGTAGCATAGCCTCTAGCTTTCTAAATAGGAAATTTGTTGGTAGGAAATTAGAA TCCTTTGGGTGAAATCCAGCCCAAAACACCCGCTTAAATAGTGAGAACTTTATTAAAGCTTTTCCAAAAAG GCGTTATCGCAAGGATTCATGCGAATTCGTGTGCTTTGAAGTCTTTAGCTTGAATGAAAGAAATTTGAAAAATCG CTCTGTTTTAGAGAAATCTTAATAAGCTTAAATTCGCTATAATAAATTTCTTTAAACGCGCCATATCCCCCA CAAAACGCTAGAGAATGATAGAAACGACAGAACATCAATTTAAGGAACCTAAGAAATGAAAAATCAGCGATCTTA TAGAATGCTATGCGTATGAAAAAATTTGCCTAAGAGATGATTCAAAAGTATTCAAGGCTTTTGTAAATGG CGCAAAATGAGTTAGACCCCTAGCACGCTACTTGGTGTGAAGAAAAACAGCAGCTCCAGCTTATCCAGTTGTA GAAGTTTAGAAGATGGTGATGAAAGATTGTTAACGACCCCTCTAAATACATCAGCCTGTCTAAAGCCAAAGAAATG GATCCAAAGCCTTAAGATTAAAGACGAATTTGCCCTATAGCTTGAAGTTGGAGAGCATGAAACAAAGGAGCATCAACCG CCTTTTAA	50	DVLSNRVALEEILALPILLSFSADKF FNSAQAGIIMGQKERVEALKNHPLYRV LRVGKITLTLFCSLKAWINHCEDITHA LLNQTKDALLQKALKLYALLKPLLELNV IASFSKIGNLFGRELESFCVKIQPKNT RALNSEKLYLKLQKGVARISEFVCF EVFSLNEKDFEKIALVLEEILNHKA
HP1427	51	AAAGTGAGCGGTATATCCACTGAAATACGCAAAATCAATAAGCCTATCAAAATCATCCAAAGGCTTTTGGAGC AAGCGGCAAGATATCTGCTTAAAGCGACACCAAGAACTTAATTTGAAATTAAGGGGAAAAAATGATAGCGT CCAGCCAGGAGAAAGATGAAATTCCTATGACTAATGAAAAATTTGTTTCAAGTGGGTGAATGGGAAGTATG AAGAAATTAAGAAAGACATCAAGTGTCAAAATACGCTCAAGAGCTTTTAAACAGGCTAGCAGCTATTTTAAACCACTC TTAATGAAGCATGCCATGTTGAGTAAATGGTGGTGCAGGCAATGTGGCCGCTGCAATAGTTTATGGCCGGAAT AGATAAGCGGACGGAGCGCATGCGGATTTTAAATGAAATCAGCGCGATTCAAGACATGATCAAAA	52	KWSGISTENYAKINKAYQIIQKAFGASG QDIPALSDTKELNFEIKGKKNDSVQPG ERWKFPWTNGKFFSVKWNNGKYEEIK EDIKVSNNNAQELLKQASTILTTINEACP WLSNGGAGNVAGGNSLWAGIDKGDG SACGIFKNEISAIQDMIK

HP1427	53	GCAACAACCAAGCCCAAGAACTCATTGATGAAAAAAGCTCAAGAGATTAAAAAGCAATTAGAAAAAGAAAGCT ACGCTATCTCCAGTATCGTTAAAAATCTAAAAATCCCCACGCCGCCCTTTCATGACTTCTACTTTACAGCAAA GGCTTCTAGTCTTTAGGCTTTTCGCCCAACAAACCATGAGTATCGCTCAAAATTTGTATGAGGCGTAGCCACC CCACAAGGGGTTATGGGGTGATCATTACATGAGGACCGATAGCTTGAATATCGCTAAAGAGGCTTTAGAAGAAG CGAGGAATAAGATTTTAAAGACTATGCAAGACTATTACCCCTAAAGCCAAAGTCTATCCAGCAAGAATAAAA ACGCCAAGAGCCCATGAAGCGATCAGGCCACTTCTATTATTTAGAGCCAAAGCTTTAAAGACTACCTTAAG CCTGAAGAATTAGGCTCTATACCTTAATTTACAAACGCTTTTAGCTTCTCAATGCAAGAGCTCTTTTGAAGCC AAAGCGTGGTTGGCTTGGGAAAGGCGAGTTTAAAGCGAGTGGAGAAAGCTCTTTTGTATGGCTATTATAA ATTTAGGCAATGACGATAAGGACAAATGCTCCCAATTTGAAAGAAATGACCCCATTAATTAGAAAACTAGAG AGCAAGCCCATGTTACAGAACCTCCAGCAGCTATTCTGAAGCGAGCTTGATTAAAGTTTAGAAAGTTTAGGCATA GGCAGGCCAGCACCTACGCCCAACGATTCCCTTTTACAAACAGAGACTACATCAAGGTAGAAAAAGCAAT CAGTGCTTTAGAGAGCGCTTTTAAAGGTGATAGAAATTTAGAAAGCATTTTGAAGAAATCGTGGATTCCAAATTCAG CGCTTCTTTAGAGAGAAATTTGGACAATATCGCTCAAAATAAGCCGACTACCAAGTCTTAAAGGACTTTTACTA CCCCTTTATGGATAA	54	NKLKAQELIDEKKAQEIKNLEKESYAI SSIVKSKSPTPPFMTSTLQQSASS6 LLGFSPTKTMSIAQKLYEGVATPQGVN GVITYMRTDSLNIKAKEALEEARNKILKD1 YKDYLPPKAKVYSSKNKNAQEAHEAI RPTSIILEPNALKDYLKPEELRLTYLIYK RFLASQMDALFESQSVVVAACEKEF KASGRKLLFDGYKILGNDDKDCLLPN LKENDPIKLEKLESNAHVTEPPARYSE ASLIKVLESIGRSPSTYAPTISLLQNRD YIKVEKKQISALESAFKVIEILEKHFEIV DSKFSASLEEELDNIAQNKADYQQVLK DFYYPFMDKIEAGKKNIISQKVHEKTG QSCPKCGGELVKKNSRYGEFIACNNY PKCKYVKQTESANDEADQELCEKCGG EMVQKFSRNGAFLACNNYPECKNTKS LKNTPNAKETIEGVKCEPGGDIALKR SKKGSFYGCNNYPKCNFLSNHHPINKR CEKCHYLMSEIRYRKKAHECICKER VFLEEDNG
HP1427	55	TGAATACAACAATCAATGCGATTCTCAATCGCTCAAAACACCCCTAGAAAAATAAAACAATGATCTTAAATTGAA AATGACTACGACCATCTTTTAACTCAAGCTAGCACCATTTAATACCTTCAAGCCCAATGCCAGGCATAGACGGA GGCAATGGCAACCATGGGCAATTAATGCAAGCGGGAACGATGCAATATTTTGGCAACACCTTTAACGCCATCAC TAGCATGATAGATAGCGCTAAAAAGCCGCGCAGATGCCGGAAGAACTGCCCAAGAAAGTCCAAACCAACCAAGT GCGTTTAAACAACGCTGATTCAATAAAACCTTAATCAAGTCTCAAGCGTTAATGACACGATCTCTTACCTCAAAG GGGACAATTTAGCAACCATCTACAAACACCTTCAAAACGCGGATTCTAAAGGTTTCAAAGTTTGGTGAGCCGA TCTAGCTATAGTTATTCCTCAACGAAACCAATATTCTGAATCCAACTACCAAGAGTTTGGCCATAACCCCTT TTAGAAAGCGTGGGTTAATCAACTCTCAAGCAATAACGGAGCGATGAATGGCGTGCAATTAGGCTATAAG	56	EYNKINAIQSQSLQNTLENKNDLKIEND YDHLTQASTINTLQSCPCGIDGGNGK PWGINASGNACNIFGNTFNATSMIDSA KKAADARRTAPESPNDPSPAFNNADF NIKNLQVSSVINDTISYLKGDNLATYN TLQKTPDSKGFQSLVSRSSYSYSLNET QYSEFQTTTKEFGHNPFPSVGLINSQS NINGAMNGVGVLGYK
HP1427	57	CTTTAGGAGCGGGAACGCTGGGGACTGGGGGAGCGGAGCGTAACCTTTAACAGCCAAACTTCGCTCATCT CAATCAGGCTAATATCGTAAGCTCGCAACCGATGGGATCTTTAGCATGCTGGTCAAGAGGGTATTAAAGGTTT TCAATCAAGCGGGCTCGCTAATATTTGGCGGAAGTGGCGGTGCAATCCATCAACAAAGCCGGGGATTAGGGA TTTGATAGTAATACGCTAGGAGTAATAGCGTGATTGGGGGTATTTAACGCCCTGAACAAATAATCAAAACCTAA GCCAGCTTTTAGGGCAGATAACTTTGATAATCTCATGAACGATAGCGGTTTGAATACGG	58	LGSNGAWGTGGSASVTFSQTSILN QANVSSQTDGIFSMLGQEGINKVFNQ AGLANILGEVAVQSIKAGGLGNLIVNT LGSNSVIGGYLTPEQKNQTLSQLGQN NFDNLMNDSGLNT
HP1427	59	ATTGACATCACCATAACGCTGAACAGCTGTTAAATCAAGCGGCAACATCATGCAAGTCTTAATACGCAATGCC TTTAGTGGCTTCCACGAATAACGAAACACTCCAGGGGTGGTCAACCATGGGTTTAAAGCACATCCGGGAATGCG TGCAGCATCTTCCAAACAAGAAATTTAGCCAGGTTACTAGCATGATCAAAACGCCCAAGAAATAATCGCGCAAGCAA AATCGTTAGTGAACACGGCAAAATCAA	60	FDITNNAEQILLNOAANIMQVLNTQCPL VRSTNNENTPGGQGPWGLSTSGNAC SIFQQEFQSQVTSMIKNAQEIQAQSKIVSE NAQNO

HP1427	61	AAGGAACGCAAACTAAAGAAAGTGCATAACCCACCCCAAAAATCTATGAAACCCCTAACCCACCCACAACTAAA GAACAGCCTAAAGAACAAATAAAAGCGATACGGCCACCCACCAAGCGCTTACGGAAAATACTACATACCCCAAAG CACCATTTTAAATAATGCAACGGCTTATTACCCACGGACAGATAGAAAATGGCTTAACCTTTTATTCTCAAAACCCCT GTGATGCGAATATGTTAATGGAGCGTAACCATACAAACTTTCTGCTTATAATTTAAACAATGTTGAACCTGAGTT TTAAAGACGCTCAAGGCAAGGTGTCATTTAGCGGTGATAGACCATCCCTAAACAATCTCAAAATACCTTGCCCT GCAAGCTTGTTAATGATTCAGAAATTTGAACAAGCTGATAGCTTTAATACCAACAATCTCAAGCCACTGCCACACAA TTTTCTGACGCTAACACGCAAGTTTGTTCAAAAGCTCAGCAAGATCACAAACCAATGTAAACAATGAGTTATGAAAC GCCGATACCAACAATTTTAAAGTAATGCGGCTGTTGACCTAATCGTGGGAAGCGCTTTAAACGCTCTCTTCCAAATTT AATTAATGCTAGATGATGCGGCTGTTGACCTAATCGTGGGAAGCGCTTTAAACGCTCTCTTCCAAATTT CTAACAGCTCATCAGAGTGGCTCTGACTTCTAAGTGGTGAATCCTTTCAATAACGGGCTGCTGCCATC TATGAAAATACGTGCTAACCCCAATCCGTTATAGATGCGTTTGAAGAAGCATCAATCTTGAAGTGAATATCCTA AAATCAGGGTTTGTAGGGTAGGGTATGAACCTTGAATGATGATAATCTGGGATAGAAAGCTTCTGCCCTTAA TCCTGAAAAATTTGTTGGTAAACTTTGAACAAGTTGATATTGTGAATTAAGAGACATTTATCCATGAATTTAGCCAC ACTAAAGGCTA	62	GTQTKEEVITQKIYENFLTHPOTKEQ KEQNKSDTATPQSAYGKYYIPQSTILK NATALFTTDKIENGLTFYQNPVYANIK VNGSVTIQNFPLYNLNNVELSFKDAQI KVNGLVETIPKQSQITLPAFLFNDSEF EQADSFNYQQLQATATQFSDANTQSL FQKLSKITTNTMSYENADTNFKGNC HDCVSDFTPQTAEEELTNLMDIAVFD SKSWEEAVLNAPFQFSNSESSECGSDF PKCVNPFNNGRVAPIYE'XVLT PQSVI DAFRRTINLEVNILKSGF'GLGYELDDN DGNLGEASALNPEKLF'KTLNKNVDIVE LRDIIHEFSHTKGY
HP1427	63	GGGATTAGGCTTGAATTTGCCTAACATTTCTAGCAGCGGCCCAACCAAGCGATCGTAAGAGAGTGGTTTTTAAACA CCTTGCAAGCAGAAATTAATGAGCGCATTTTATAGAAGTGTTCAGCGAGCGCTTCTATGGTTAGAGGCTTTGA GTAGGGGGCTAAAGTGCGGTGTTTTGAACAAACAAAGCGCTTATAAGACGCTTTTAGAAAATATTTCCCTTT TTAAAAACCGCTTGAAAAGAAATGGAATTCAAACCTTTTAGATGACGCTTTCAAGCTTTTGCCACGCTGTGTTT AAAAATGGCGTTTGAATATTATTTATTTGATCCTCTTTTGAACAAGTGGTTTTAGGATTTATGAAAAGTGT TTTCAAGCTTTAGAAAGTTATTGAACGCTTAAATCAAAAATCTTTAGTGGTTTTAGGATTTATGAAAAGTGT AAATGCCTAAGTCTTGAACTTTAGCTATAATCAACAAACAAATTTGGAAAACCACTTTAAGCATGAAAGCATGCATG GAATAGGCATGCGCAGAAACAAAGAAATACCGCGCAACACCTTCTATGCGCAACAAGATCAAGAACCAAGAGGCTC ATTGGAAGCGTGTAGTGATGCTTTTATTGGTGGGTGATTATCTATGCTTATGGGAATAAGGAAGAATCTAAA GAAACGCTTCTAAACACACCAAGAGTTCAAGCTAATCTATGCGCAACAAGATCAAGAACCAAGAGGCTC TAATATCCAGCAATATTGGTCTTGGGCTTTGATGCGATTGATGCGCTTTTGGGTGAATCTGGTCTCTCAAA TGGCAGACGCTACCTTAAGGCTTCTATTCTGTTAGAAATGAGTAATGAAAAGCTTTTGAATGAAGTCAAGGTTAAAGA CACAGCGATTAAAGACACGATTATAGAGATTCTGCTCTAAAGCGTGAAGAGTGGTTACTAACAAAGGCAAAA ACAAGCTTA	64	GLGLNLPNISSTRPTKANVRESFFNTLQ AEINGAHFIEVFGSASMGLEALS RGA KSAVFFEQNKSAKYKTLLLENISL FKNRLK KEMEIQTLDDAFKLLPTLCLKNGVLNII YLDPPFETSGFLGIYEKCFQALERLLKR FNPKNLLVFEHESMHMPKSLVTLAI KQKFKGKTTLTYFQ
HP1427	65	AGGACAAAGATACGACGACCATCACCTGCAATTCGTATTATGAGCCAGGACATGGTGGGCTATATCCACTGCAAAT ATGCGAAAATCAATCAAGCCTATCAAAATCATCCAAAGGCTTTGACAGCCAATGGAGCTAATGGAGATGGGTCCCC GTTTTAAGCAACACCACTACAAACTTGATTTCACTATCAATGGAGACAAAGAACGGGGGCAACCAACCAATACACCT GAAAAGTCCCATGGAGTGATGGAAATATATTCACACCCAATGGATTACACAATAGTAACACCAACAGAAACAAAT ATCAACACAGAAAATAACGCTCAAGAGCTTTTAAACAAGCGGAGCATCATATCACTACCTAAATGAGGCATGCCCA AACTCCAAAATGGTGTAGAGTTATTGGCAAGGGATAAGCGGCAATGGGCAATGTGCGGATGTTTAAAGATGA AATCAGCGCGATCCAGGCTATGATCGCTAACGCTCAAGAGCTGTCGCGCAAGCAAAATCGTTAGTGAACGCG CAAAATCAAAACAACTTGGATACTGGAACCACTTCAACCTTACACGCGACCGCAGCTTTGCGCAAGCATGCTCAA AAACGCTCAAGCGCAAGCAGAGATTTTAAACCAAGCCGAACAAGTAGTAAAAAATCTTGAAAAATCCCTACAGCCTT TGT	66	GQDTTITCNSYEPGHHGPSTANYA KINQAYQIIQKALTANGANSDGVPVLS NTTTKLDFTINGDKRTGGK/PNTPEKFP WSDGKYHTQWINTIVTPTETNINTENN AQELLKQASIIITLNEACP'VFQNGGRS YWQGISGNGTMCGMFKNEISAIQGMIA NAQEAVAQSKIVSENAQNQNNLDTGK PFNPYTDASFASMLKNAQAQAELNQ AEQVVKNFKEIPTAF

HP1427	67	CTACTAACAAATGGCCTTTGTTCCAAAGGTAACTGGATCTTTATAACGAAATGGTGGCTCTATCAAAAACCTTTGAGTC AAAACATCAGCAAGAACATCTTTCAAGGCAACAACACACGAGCCAAACCTCTCCAACAGCTCAGTGAGCTT AACACCGCTAGCGTTTATTGACTTACATGAACCTCTTAAACGCTAACAAACGAGGCTGAGTATTTTCAAAAC AACACTAATCAAGCTTATGGAATGGTGTACCGCTCAACAAATCGCTTATATCTTAAGCAAGCTTCAATCACTATG GGGCCAAGCGGTGATAGCGGGCTGCCGAGCGTTTGGACGCGCTTACGCAACATGTTTCAACTCCGCTA ACGCCGGAACGATTTGAGCGCTAAGGAATTCAGTCTGCTGCAAAACATGCTCAATAATCTCAAAACGCTTTA ACGCTAGCCCAACACGCTAACATCAGCAATTCACCGCTATCAAGTGAGCTATGCGGGCATATTGATCAAGCGC GCTCTACCCCAAC	68	TNNGLCFQGNLDLYNEMVGSIKTLSQ ISKNIQGNNTTSQNLNQLSELNTA SVYLTYNNSFLNANNQAGGIFQNTN QAYGNGVTAQQAAYILKQASITMGPS DSGAAAFDAALAQHVFNANAGND LSAKEFTSLVQNVNNSQNALTLANNA NISNSTGYQVSYGGHIDQARSTQ
HP1427	69	AGGCATTGATGTAAGCACCGCGAGTTTAAAGGCGGAGACATTCATCTCAAACCCAGCAATCCATGGAAAATATCA AAGCGATTTTAAAGAGAGCGGTAGGATGAGCGTGTAAACGACTATTTATTGAAAGTTTAGACGATT TTGCGGTGGTGAATGAATCTATGGAGTTATTTACAGAGCTTATCCGGCCAGAGCGACTTCAAGTGGCTAAA CTGCCATAAGACGCTTTAGTAGAAATGAAGCGATAGCCATTAAGTAATTTAAGGGACTATCAGCATGAAAAA GAGGTCGTGTCATAGCGGTGGATTGTAGGCTTCTTGCGTATTCATGCAAGTTAGGCGATAAGGCTCT GCGTGATAGAAAAACGATGGCGCAACGCGACTCTTTTGGGAATGCTGGCTTATTTCTGCGTTAAAAAGCC CCACTCTCATGCCGTGTGTGTGTAGACACCTGAAGCTCATGCTCAAAACCAAGCCCTTAAATTCATTTT GGGCTTAATTTAAAGCTCTATCAATGATTTTAAATTTGAAAGCGCAAGCCCAATCCAGCCGACCATG GCGTTGTTGAAACGCTACGGGTGCTGATGATGATCATCAATGCTAAAGAGCGCATGGACTTTT	70	GIDVSTGEFKGADIHSQTTQSMENIKAI LKEAGLGMDSWVKTILLKSLDDFAV NGIYGSYFTEPYPARATFQVAKLPKDA LVEIEAIAIK
HP1427	71	GGCTGAAACAAGAGCTAAAGGATTGTTATGGCTGTTTACATTCATTTAGAAAACGCGCTAAAACAAATTGAAAGA ATTGATTGATTTAACCGAGCGGATATAAGAGACATCAAGCTCGCTAAACACACCGAAATTTTGAAAGAACCATCA AAACAGCTAGCGATTCAAGCTTTTGAAGAAAGAAAGCGAATATAGATGTCAATGTTGCTTTTAAAGAACCAATTC CCTGATAAGAAATGAGTGAATTTAGACGAAAGAAAGCGGATTTTAAACCAATGCGAGAGTCTTGTGTTGTT TTGAAAGAAAAAATGATTATTCGCGCATGGCTTGGGTTCTGAATTTTCTGCTCATCCAAACAAATCA TTCCCATGACACTTGGATTATAAGGCTCTAGGCGATGGGAGTCAATTTTAAAGAGTGCAGGCGTAAATGGG CGAATCTTATCTCACTCAACACTTCTACACCGGCTTCAAGCCCATCAGAGCATGGTGGATGTTACCGGGAATA ATATTCTAACGCTAGCGATGAATTTTATAGCCGCGAGCGGTGATTGCAAGCCCAAGCGGCTATATGATGGC ACTAAAACGTGAATATGGCGTGGATGTGGAAGCCATTGAAAGGTGATGATGATGTTGTTGCTCGT	72	AETRAKGFVMVVLHSHLENALKOLKEL IDLTERDIRDIKLAHTEIFERNHQKQLA IQAFEKEKANIDVQMLSLKNQFPDKEM SELLDEKTSDFLQNMRESLFVLKEKNLI YSRMAFAVSEFYSSLIQIIPHDTCDYK GSRHVGSHFRLRVOA
HP1427	73	CAACCACACAATCTCTAACAGCAGCGGTGATGGGAGCTTAAACACCGTGTGCAAAATGTCAGCAATTTCCAAACAA AGCATTCAAAACGCTTTTCAAAACCAAGAAAGTAATATCCAGCTTGGCGAATGCGAATTTATAACACTAATGGGAGT CAGTCGCAAGAGATGACACCTAACAAATAACCAAGATTACGCAATCCAAATGAGGGGAAATTTTACCAGCTCATCAAT ACCATTAACCAAGCAAGTGCTACAGACATGATGCTTTAATTAATCAAAAGCCCAACCAACAAAGCGGATCA GCAAGCA	74	TTQSPNSTVMGALNTVLQNVSNFQCSI QNAFQNOESNIQAWANAIYNTNGSQS QEMTPNNNQDLRIQLRANFYQLINTIN QQVPTDMNALINQSQQTQQTSGSAS
HP1427	75	GCAATAGCTCTTCAGGGGTTTGAGCATCAGCGGGAACGCCAATTCGAAATATTTTAA	76	NSSSGGLSISGNAQLQNIL
HP1427	77	CGATCAACATTGACGGGCTACTACCGGCTTATCATTAAAGCTCTCAACCGTCAATGACGCTTAGGCTATGGC GTGAGTAACACTGTGGCAACCAATTAGAGGGCATTTCTAATATCTTGAATCAATTTGGCAAGAAAGAGACTTTTATT CTAGCCGTCAATCTCTAGCATTTCCCAACAAATCATAGGCTTAAAGGAAGCTGATCCCTTAAAGCCCATCTT CACAGATCAGAGCCAAACTCTTTCCAAACACCCAAAGCGGTTGATCAGGGCATCGGCTAAGCACTAATCAT AGCTCTATCAATAGCTTAACCTAGCAACACCAAGAGGTTAAAGAACAGCTCCAAACACCGCGCAATCCAT GACAGAAATTGTCAAACAAATTGAACACAG	78	INIAGPTTGLITLSSQTVIDALGYVSNT VGNQLEGISNILNQIGKRKDFYSSRQIS SISQIIGLKSSDPLKAHSSQITAKLLS NTQSAFDQGIALSTNISSINSLNPSNNT QEVKKQLQNTAQSMTELLQDIEH

HP1427	79	AACCACAAACCATAGACGGCAAAAGCGTAACCAACCGATCAGTTCAAAGTGGTGGTAGCATCGCTAGTG GCAACATCATGTCATCAACCAAAATTAGACGGTGTGCTGATAGCGCTCAAGCGCTCTTAGCGCAAGCGAG CAGCTCATCAACCATCAAGCAAGCATGCCGATTTCCATGCTACTAATAGTAGTGAGGTAACGCCCAAAAT TCTCTACTACTGGGAAATATGGGGCTTTTCAGAAAGAAATCAGCGGATCCAAAAGATGATCAGGACGCG CAAGAGCTAGTTAATCAACGAGCGTCATTAAACAGCAACGAACATCAACTCCGGTAGGCAATAATAATGGCAAGCC TTTCAACCCCTTTCAGGACGCAAGTTTTCGCAAGGCGATGCTCGCTAACGCTAGCGCGCAAGCTAAATGCTCAATT TAGCCCATCAGGTGGGCAAGC	80	TTTQTIDGKSVTTTSSK/VGSIASGNT SHVITNKLDGVPDQAALLAQASTLINT INEACPYFHATNSSEANAPKFSTTTGK CGAFSEEIAIQKMITDAJELVNQTSVI NSNEQSTPVGNNNGKPIFPFTDASFA QGMLANASAKMLNLAHQVGGQ
HP1427	81	CAGAGATGGGAAGAGATCCAGTCTCTATTACGGCGGATCATCTCGCCTACAATACAATTGACATACCAT ATAACGCTGAAACCTTTTGCAACAGCGCCACTATCATGCAAGTCCTTATTACTCAAAAGCCGATGTGCAACGA GCAATGGCGGTAAAGCGTGGGGTTGAGTTCTACGCCCTGGGAATGTGATGGATAATTTTGGTCTCTTTAAACGCT ATTAATGAGATGATTAAACCGCTCAACACAGCCCTAGCAAAACCCACAGCTTAACGCTAATGAAACGCCCAATC ACGCAACCCCAACATTTCAACCCCTACACCTCTAAAGACAAAGGTTCCGCTCAAGAAATGCTCAATAGAGCTGAAGC TCAAGCAGAGATTTAAATTTAGCTAAGCAAGTAGCGAACAATTTCCACAGCATTCAGGGCCTATTCAAGGGGATTT AGAAATGTAAAGCAGGATCGGCTGGCGTGA	82	ENGKEIPVSYGGSSFSPTQLTYHNN AENLLQAAATIMQVLITQKPHVQTSNG GKAWGLSSTPGNVMDIFGPSFNAINE MIKNAQTALAKTQQLNANENAQITQPN NFPNPTYSKDKGFAQEMLNRAEAQAEIL NLAKQVANNFHSIQGPQQGLEECKAG SAGV
HP0218	83	CATCAAGCAAGCGAGTGTGGATAACTTAGATGACCCCTACTGATCAAGAGGCCATAGAGCAATGTTAGAGGGCTT GAGCGATAGTGAAAGGGCGCTAATTTAGGAATTAACGACAGCTGATGAAGTGGATCTGATTTATAGCGATCTAA GAAACCGTAAACCTTTGATAACATGGCGGTAAAGGTTATCCATTGTTACCAATGGATTCAAAATGGCGCGGATA TTGCCACTATTACGCCACTAATGTTGATGCGGACAAATAGCTAGCGATAATCTATTATGCTTCCATAGAGCCTG ATATTGCCAAGCAATACGAAACAGAAACCAATTAAAGGTAAGAAATTTAGAACTAAATAGCTAAGGCTTTAGGTG GCAATAAAAGATGACGATAAAGAAAGTAAATCCACAGCAGAGCTAAAGCAGAAACAAATAGATAGACA AAGATGTCGAGAACTGCCAAGATATCAGTGAATCGCTCTTAAGAACAAAGAAAGAGTGGGAATTTGTA GATGAAATGGTAATCCATTGATGACAAAGAAAGCAGAAACCAAGTGAACAAAGCCCTGTCAACAGGCCTT TATAGGCAAGAGTATCCACATTTGTTTAGCGCAATACACCCCTATTGAAATCACTGACTCTAAAGTAGATGC CACTCTACAGGTATAGTGGGTTGTAGCCAAAGATGTATGGAACATGAACGGCAGCTATGATCTTATTAGACA AAGGCACATAAGGTGTATGGGAATTCAAAGCGTGAAGGTGGCACACCCATTATGACACGCTTAATGATAGCTTT ACTAAAGCCATTACGCCCTGATGGTGTGATAATACCTCTAGCAACGCTCAAGCAGCAGGCGATGTTGGGTGAAGCAG GGTAGATGGCTATGTGAATAATCACTTTATGAAGCGCATAGGCTTTGCTGTGATAGCAAGCGTGGTTAATAGCTTC TTGCAAACTGGCGCTATCA	84	HQASECLNDLDDPTDQEAIEQCLEGLS DSERALILGIKQRADEVDLIYSDLRNRK TFDNMAAGYP LLPMDFKNGGDIATIN ATNVDADKIASDNPIYAS'EPDIAKQYET EKTIKDNLEAKLAKALGGNKDDDDKE KSKKSTAEAKAENNKIDK'DVAETAKNIS EIALKNKKEKSGEFVDENGNPIDDKKK AEKQDETSPVKQAFIGKSDPTFVLAQY TPIETLTSKVDATLTGIVSGVVAKDVW NMNGTMLLDKGTKVYGYQSVKGGT PIMTRLMIVFTKAITPDGVIIPLANAAQA GMLGEAGVDGYVNNHFIMKRIGFAVIA SVVNSFLQTAPIIALDKLIGLGKGRSER TPEFNALGQAINGSMQSSAQMSNQIL GQLMNIPPSFYKNEGDSIKILTMDDIDF SGVYDVKITNKSVDDEIKQSTKLSRE HEEITTSKPGGN
HP1301	85	TGTTGGCGATGAAATCTCAGGACTTAATATGATATGAGCCACAAGACTATTAAAGGCTCTACAATTGAGAGTTCTAA TCTTATCAGCATTTATAAAAGATTGCGAGCGGACTACCTTTTGGGACTATCTCGCGCTTAGACCTTTTAAAGACGC TTTTTATAAGACTTTACCGAAAGAAAGCAAAACGCTCTAATCTATGCTTATAGAGCGGAGCAGACCTTAAATGCG GGACATAATAGCCAAATATTGTTAAGTCAATCTGTGATTTAGACCCATACGACCTATTAAAGTTGATAGATTTCTTT CACCCACAACCTGAAATGGTAAAGAGACTACAAATTTAAGAACTACAAAGTAGGATTGAGAACATTTATGCGACA CTCTATAACACATTGGTAGGGTTATGTGGATAAATTTTAAAGAAAGCCACAAATGAGGACTTTATGTCTAGC GATAAATTTGTTGAGAGATACCGCTACACTAGAAAAGAAAATATGGCAAGGACACAACTTAAAGACATAATGAAT ATTGACAGAGATTTTCATTGTTATATTGAAGTGTAGGTTATGGAAGACAAACCTTAAAGACATACTTACAGAC AAAGAGGTTAGCTTTTGTATTCAAAACGAACCTAGTAGCACATTTGATTTGAAAACCACTTATTGATATGGGTA AACAAATCAGACAAGTAGCGATTTGCTATGGCGGACAATGATTGCTAATAAGAAATAAGACTTATAGGATAGATTGA TAAGTTGCAGACCTGATAAATTTGGTGAGGTTTGGGCTAAATTCACAGGATTAATTTTCAGTTCTCCTAGCGACTTAC CACAAAGCTCTCACAGCATAAATGACAGCGTTTATACCTTTCTC	86	VGDEISRLKYDMSHKTIKSTIESSNLIS IYKKIASGLPFGTISAFRPFKDAFYKDF EKEQNALIYAYKSGADPKNADIAKYWL SQSVLDLPYDPIKVVDFFHPQENGKE TTKFKNYKORIENTIYATLYNTLGRGYVD KFFKKEATMRDFMSSDKFVERYRYTR KENMARTQALKDIMNIDRDFIGYIEVLG YWKDNPKDNILPDKEVSFVFNNEPSS TFDLKNHLLIWGKQFRQVAICYGGQLIA NKNKTYRIDLISCRPDNFBGEWAKFTGI KFSVPSDLPOALTRINDSVYTFL

HP1301	87	ACAAACCCCTTTACCCACCGCTCAAAACCCCTTTAAACCATGCTAAAAAACCTCAAGCTTGAATGGGTGGAGATTGT AGGGTTGGAGCATTTGGATAAGTGATTTATTTAGATCAAGCCCTCATAGCAAAACCCACGAAAGCAACCCCTGCCA CTTACACGGGAGTGATGATGAATCAGGATTTATTTGCCGAGCAAAAGAGCTAAATTTTAGGCTATAGTGCGA GCCGTTTATAGCTTTAATGTTAAAGGAGGCGGTGCGAGAAATGCCAAGCGGATGGGACATTAATAAGAAATGCA CTTTTGCCTGATGTGTAGTCCCAATGCGATAGCTGTAAGGCGCTAAATACACCCCAACCTTTAGAAATCAAGGT GAAAGCAATCCATTGCCGATGTGTTGAACATGAGCGTGAAGAGGCTTATGAATTTTGTCTAAATCCCTAAAT CGCGTGAAAGTTAAACCGCTTATGGATGTGGCTTAGGCTATATCACTTAGGGCAAAACGCTACGACTTTAAGTG GGGGGAGGCTCAAGGATCAAAATAGCTAAAGAAATGAGTAAAGAACACAGGCAAAACCCCTTTATATTTAGAT GAGCCTACTACCGGTTTGCAATTTGAAGACGTGAATCATCTTTTACAAGTCTTGCAAT	88	QTLPTAQTLLNHAHAKTQSLNGVEING EHLKVIYLDQAPIGKTPRSNPATYTG MDEIRILFAEQKEAKILGYSASRFSFNV KGRCEKCGDGDGDIEMHFLPDVLV QCDSCKGAKYNPQTLEIKVKGKSIADV LNMSVEEAYEFFAKFKPIAVKLTLM VGLGYITLGNATTLGGGEAQRIKLAK ELSKKDTGKTLYLDEPTTGLHFEDVNH LLQVLH
HP1301	89	GGTATAAGCTTCTCTTACCACCAATGCGGCTCATTTGCATATCGGCAAGCGGTATCAATCTGTCCAATCAAGCG AGCGGGCGCACCCCTTTAGTGGAATCTAACCGGGAATATCACCGTTGATGGCCCTTTAAGAGTGAATAATCAAGT GGGTGGTTATGCTTTGGCAGGATCAAGCGGAATTTGAGTTAAGGCTGGTACGGATACCAAAACCGCACAGCC ACTTTAATAACGATATTAGTTGGGAGATTGTGAATTTAAAGTGATGCTCATACAGCTAATTTAAAGTATTG ATACTGGTAATGGTGGCTTCAACACCTTAGATTTAGTGGCTTACAGGTAAAGTCAATATCAACAGCTCATACGG CTTCCACTAATGTGGCGGTTAAACCTTCAACATTAATGAATGTTTAAAGCAATGGGTGAGTGGGGAA TACACTCATTTAGCGAAGATATAGCGAGTCAATCGCGCATCAATCCGTGCTTGAACCTGGGCTAGGTCAT CTTTCTGGGGTGTCAAAATTTAAAGCGGTGAAACCTGTTATAGATGATTTACTATAGCCCTTGAATATT GACGCTAGGAATATTAAATGTTGAATCACCGAATTCGCTTCTCAACCCAGAAACCTTGGGGCACATCA AAGCTTATGTTAATCTAACCTGGGTCAAAATCGGTGATGACTATAGTCAATTTTCAAAATTAACCATTCAGG GGGATTTTCATCAACATCAAGGCACTATCAATTTATTTGTCGAGCGGCAAGTAGCCACCTTGAATGTAGGCAAT GCGGCAGCTATGTTCTTTAGTAATAATGTGATAGCGGACTGGGTTTACCAACCGCTCATGAAGATTAAACAGCGC TCAAGATCTCATTAAATAAAGAACATGTCTTATTGAAGCGGAAATCATCGGTTATGGCAATGTTCTTTAGGCACT AACAGCATTAGTAA	90	YKASLTNAAHLHIGKGGINLSNQASG RTLLENLTGNITVDGPLRVNNQVGGY ALAGSSANFEKAGTDTKNGTATFNN DISLGRFVNLIKVDAHTANFKGIDTGNG GFNTLDFSGVTGKVNINKLITASTNVAV KNFNINELVKTNGVSVGEYTHFSEDI GSQSRINTVRLETGTRSFSGGVKFKS GEKLVIDEFYSPWNYFDARNIKNVEIT RKFASTPENPWGTSKLMFNNTLGO NAVMDYSQFSNLTQGDFFINNQTINY LVRGGQVATLVNGNAAAMFFSNVDS ATGFYQPLMKINSAQDLKKNKEHVLKA KIIGYGNVSLGTNSISNVNLEJQFKERLA LYNNNRMDICVVRNTDDIKACGTAIG NQSMVNNPDNYKYLIGKAWKNIGISK ANGSKISVYLLGNSTPTEKGGNTNLP TNTTSNVRSAANALAQNAFFAQPSAT PNLVAINQHDFGTIESVF
HP1301	91	CCGATAAGGGATTAAAAAGGTGTTCAAAGACAGCAAAAGACGCTTGGGGTTCATCTATGAGATCAGCGAGTTC ATGAAAGCCCTATACCGCATTCGCTAAATAAAGACCGATACGCTATTTATGAGGTATCTCCCTCTAGGTATTGG GCCAGCATTTTAAAGACTGCTTTATGTCAAATACCTGATTTGACGCTTTGAAAAGCTTTGGTGCTTATTAT ACCAAATTTGGATTGAGGAGGACGATCACGCGCATCAAGCAACCCAGTATCAACATTATCAAAACGTTAAAGC AATAAGAGCGTTGAACCATCAAGAGCTTATATTGAATAGCATCGACTCTTAAACACCTTTGATCAATACCTCTATA ACTTATGGGATAGCTTCTGTTTATCATAGCAATGGTGCGCTCTTAGCCCTAGCTAATTTATTTATGCGCAG ATGAAGAGAAACCCCATTTATCGCTATGGATGCCGAAACCCCAAGTGAGCATATTTGCCAACAACGCCAAAGA GGCAGTCAATGGAACGCGGATTTGACAAAGAAAGAGAAATGGGTAAATATATCGGAATTTAACCTTTTA AAGCGTAAAGAAACCGCATGCTTTAAACGGGATTTTGTATGAAAGAAATTTATGGAGGCAAGACACGAG CAAAGTGATTAGCTGTTATGACATCACTAAAGAAATGTATAGCAATTATAGGAAGTGGAATGAGAACTCCTCAAGA GCGATACAAATCTTTGTATACACTATACGCTGTTTACACATAGAGGGCAAGATGATTTTGAAGATGATTT TGATCTAGAATGATTAAAGATTGCCAAGCATCAAAACA	92	DKGLKKVFKDSKKDACGFIYESEFMK AYTALLKKQDRYVYLLRYLPSRYWASI LTTALYVKYPDFDALKKLLVSYYYQTWJ AGGTTTRIKQTSINIKNVSKNSVETIKE LILNSIDSYNTFDQYLYNLWDSSSVYHS KWVRPVLALANYFMADEEKPHFIAMD AETQVEHILPQTPKRGSQWNADFDEKE KREEWVNNIANLTLLKRKKNAHALNGD FDEKRIYGGKDTSKVISCYDITKELYS NYRKWNEKSLQERYKSLYNTITPVLHI EGQEDDFEDDFOLE

HP1542	93	AGAAAAAACGCCAGCTTTGTAAACGAATAATTAACATTCAAGGAGCGTTTAAACAACAGCCACGCAAAAATAGA GGTGCTTCAAAATTTAGTGATCGCTTCAACGCTTCTTAAGCACCGGGATTATGGTTAGAAAGTAGGGGGGCTT TGAATAATTCTGGAGCGATCCATTTTAAATTAGAAATACCCAAACGCCGCTCATTAAGCAGAGGGGATC ATTAACCTCAACACACCCAAACGCCCTTTATGAATGTCAATAACAGCATGGCCCAATAACGACTTACACTTTATTAA AAAGCAGCCGTTACATTGATTACAATATCAACCCCAACGCTTGCAATCGTATTGAATCTCTACACTTAAATCAATAT CAACGGGAACACATAGAGGAAGAAAAACGGCGATTGACTTATTTGGCCCAACGGTTTGTGCAAGATAAGGGG TTATTGTTAAGCGTAGCGTGCCCAACTCAACAACGCTTCTCAAAACAACATTTAAGCCTTCTGTCCTTTATAACC AAGTTAAATGTCTTGGCGGATAGGATGATTTTACCCCTACCTTACAAGATTACATTGTGGGCGATTCAAG GGCAAGCGCGCTCAATCAATGAAGCTGTGGGGGAACGCTATCAAGTGGCTTCAACATTGATGATGGAGAC TAAAGAAAAACCGCTTTTGGCGCGATTATTAATAAAACCACTC	94	EKNASFTNNLNQAGAFNNNATQKIEV LQNLVIASNASLSTGIYCLEVGALNN GAHFNLENTQTPTPLICAEGIINLTTC TPFMNVNNSMANNTTYTLKSSRYIDY NINPNSLQSYLNLYTLININGNHEEKNG ALTYLQQRVLLQDKGLLSVALPNSNN ASQNNILSLVLYNQVKMSCGDKAMD FTPPTLQDYVGIQGSALNQIEAVGG NAIKWLSTLMMETKENFFFAPIYLNH
HP1542	95	CACGATTAATGTTCCAAATAACGCCACGATCAACGATTATGCGAGCTTGATTGCGAGTAATGGCTCTCACCTTAATTT TAACGGGGGGTTAATTTCAATTCAGCGAATATTACTACGAGTTTGAATAATTCCTCTATCGTGTTTAAGGGGGCGGT CTCTTTAGGAGGGCATTTAATTAAGCAATAACTCTTCTTAGATTCCCAAGGCTCTAGCGCTATCACCTCTAACAC GGCGTTTAAATTTCTATGATAACGCTTTTCTCAAGCCCCATCCTTCCATCAAGCCCTTGACATTAAAGCGCCCTTA AGTTTGGGAGGCAACCTTTTAAACCTTAACACAGCAGCGTGTGGATTAAACAAACAGCCAGCTTGTTTGTGGCGA TCAAGGGAGTTTGAATATCGCTAACATTGATTACTAAGCGATCTAATGATAATAAAATCGTGTGATAACATCAT CAAGCGGACATGAATAGTAATGGTATGAGCGTATCAGCTTCTTTGGCATGCACATCAATGACGGGATTATGATGC TAAACCAAACTTATAGTTCACTAACCCCTTAAACGCCCTAAACATCACCAGAGCTTTAAAGACAACCAACTA AGCGTTACGCTCTCAATCCGGGTATTAAAAACACGCTCTATAACATTGGCTCTGAAATTTTAACTACCAAAA GTTTATAACAACGCTAATGGCGTGTATTCTTAGCGATGATGCACAAGCGGTGTTTATCTCACAAGCAACGTGAA GGCTATTACAACCTTAACCAATCCTATCAAGCCAGCGGAGTAACAACACCCAGAAAAATAATCTAACCTCTGAA TCTTCTATCATCTCGCAACCTATAACGCGCAAGGCAACCTATTAGCGCGTTGCACATCTATAACAAGGGCTATAAT TTCAACAATATCAAGCGTTAGGGCAATGGCTCTCAAACTCTACCCCTGAAATCAAAAAGGTATTAGGGAATGATTTT TCGCCCTCA	96	TINVSNNATINDYASLIA:SNGSHLNFNG AVNFNSANITTSNNSS VFKGAVSLGG QFNLSNSSLDFQGS:AITSENTAFNFY DNAFSQSPITTFHQALDIKAPLSLGGNLL NPNNSSVLDLKNSQLVF:GDQGSNIAN IDLLSDLNDKNRVYNIQADMNSNWY ERISFFGMHINDGIYDAK:NQTYSTNPL NNALKITESFDNQLSVTL:SQIPGIKNTL YNIGSEIFNYQKVYNNANGVYSYSDDA QGVFYLT:SNVKGYYNPNQSYQASGSN NTTKNNLTSESSIISQTYNAQGNPISA LHIYKGYNFNNIKALGQMALKLYPEIK KVLGNDFSPSSLNALNSNALNQLTKLIT PNDWK

HP1542	97	TTTAGAAGTGGGTAATCGTGTGGGATCGGGAGCTGGCACGCCACACCGGCACAGCCACITTAACCTTGAACGCTAAT AAGGTCAATATCAATCCAAATATCAACGCGTATAAAACCTTCGCAAGTGAATATAGGCAACGCTAACACGCGTTATTACC ATTGGTTCGGTTCTTTGAGTGGGATGTTTGAGTTCCTTTAGCTAGCGTTGGGATAGGGGCTAATGCTCCACTCT GGCCTAGCTATCTTTTAAGGACGACTAACGCTACTAACACGGGCTTTAGTAATGCAAGCGGCGAGTTTACCTT TGAAGAGAACGCCACTTTTAGCGGGCGGAAATGGAATGGGGGACTTATACCTTTAATAAGAGTTTAGCGCTACCA ATAACACCGCCTTTAGTAGCGGTAGTTTAAATTTAAAGGTGAAGCTCTTTAATGGTACTTCGTTTAGTAACGCTTC TTATACTTTGACAATCAAGCCACTTCCAAACAGCTCCTTTAATGGGGGACTTTTACTTTTAAATAACCAACTAAT CCAACTAACACGCTCAGCACCCCAATTCAAACCACTAACGATCCAAACGCTTCCTTTAATAACGCCACTTTTAAAC AATTTCCAGCAAGCCTTAAACATTCAAACCACTAACGATCCAAACGCTTCCTTTAATAACGCCACTTTTAAAC ATACCGGTAAATCACTATAGAAAAGATGCGAGTTTAAATAACACGACTTCTTTAGTGTAAACGCTACCACTCTTAAGGGCTTTGTG GAGTTACCGGTGCGTTACTTTAAGCGGTAAATGACTTGAAATGCTCAACCTTGATTTGGGAGTTCTAA AATCACTCTCGCTCAAGGACGACTTTCAACCTCACAGTTTAGGCAGTGAGAGAGCGTAACGATTTTAAATCTAG CGGTGGGATCACTTATAGTAACCTTTTAAACCATGCAATCAACGGCTTGACAAAGTCCCTTAAACCAACGAAACGAAAGCC TTTCAATCCG	98	LEVGNRVGSGAGTHGTATLNLNANP VNINSINAYKTSQVNIIGNANSVITGS SLSGDVCSSLASVIGIGANCSTSGPSY FKGTTNATNTAFSNASGSFTFEENATI SGAKWNGGTYTFNKEFSATNNTAFSS GSFNFKGVSFFNGTSFSNASYTFDNQ ATFQNSSFNNGGTFNNTNPTNNAQ HPQIQNSSFSGNATTLKGFVNFQQA NSNHQLTIQNASFNNTFNNTGKITIEK DASFNNTFNNTSVDTNMSVTTGGVTL SGKNDLKNGSTLDFGSSKITLAQGTTF NLTLGSEKSVTILNSSGGITYSNLLNH AINGLTSALKTNESLSNPQSFAGQLWD IITYNGVTGQLLNNENAAATSKPTDSSPSK SSTNSTQVYQVGYKIGDTIYKLQETFS HNSIIQALESGTYTPPPVINGSKFDLSA SNYINADMPWYDHYKYYIPKSNFTESG TYLPSVQIWGSYTNSEKQTFSSANGSN LVIGNSTWTDHNVSSSGTVSFGDTS GSALNGHCGPWPYYQCTGTNTNGTYS AYHVYITANLRSRGNRIGTGGAANLIFNG VDSINIANATITQHINAGIYSSSMTFTSQ SMDNSQNLNGLNSNGKLSVYGTFTFN EAKDGKFIENAGQAVFENTNFNGGSY QFSGDLSL
HP1542	99	GGCTATGGATGAGCAGTTAAATCTTAGACACCGTTAAGGTTAAAGCGACTCAAGCGCTCAAGATGGGCAAACTA CAGAACTCTGTAAGCGATTCAATCTGACATCGTTCTGTTGATTCAAGGTTAGACAATATCGGTAATACGACTACTT ATAACGGGCAAGCTTATTGCTGTCAATTCACCAACAAAGAAATCCAAAGTAGGGCTTATTCTAAACCAAGCATT AAGCTTCTATCGGCTTACCACCTCCGATAAAATCGGTGAGTTGCTATCGTACAGGTGCGTTAATCACCGCTTCT GGAGATATTAGCTTGACITTTAAACAAGTGGATGGCGTGAATGATGTAACCTTTAGAGAGCGTAAAGTTTCTAGTTCA GCAGGCACAGGATTGGCGTGTAGCAGAAGTGATTAAACAAGAACTCTAACCGAACAGCGCTTAAAGCCTATGCGA GCGTTATCACACGAGCGATGTGGCGGTCCAGTCAGGAAGTTGAGTAATTTAACCTTAAATGGGATTCATTTGGGG AATATCGCAGATATTAGAAAAACGACTCAGACGGACGATTAGTCGACGCGATCAATGCGGTACTTCAGAAACCGG CGTGAAGCTTATACGGATCAAAAAGGGCGCTTGAATTTGCGCAGTATAGTGGTGGGATTGAAATCAAAACCG ATAGTGTCAAGTAATGGCCTAGTCTTAAACGATGGTTAATGGCGGTCAAGGATTTAAACAAAGGCTCTACTACTAC GAAAGGCTTTCTCTCACACGCTTAGACGCTAAGAGCATCAATGTC	100	AMDEQLKILDTVKVKATQAAQDGGQTE SRKAIQSDIVRLIQGLDNIGNNTTYNGQ ALLSGQFTNKEFQVGAYSNQSIKASIG STTSDKIGQVRIATGALITASGDISLTFK QVDGVNDVTLESVKVSSSAGTGIGVLA EVINKNSNRTGVKAYASVITTSDBAVQ SGLSNLTLNGIHLGNIAIKNDSDGR LVAAINAVTSETGVEAYTDQKGRNLNR SIDGRGIEIKTDSVSNGPSALTVMVNGG QDLTKGSTNYGRLSLRLDAKSNV

HP1542	101	TTTTAAGGCAAAAGACATTTTATCACAGGGGCTGTGGATCGGGCAATGAGTGGAAACCGGTGGGGGGCGGATA CTGGTTTTGAAAGCTCAACGAATTAAGCGTAATGGGGCTTATTTCAAAATAACAGAGCCGGGACGCAAACTTCT TGGATCAATTTGATTTCCAATAACAGCGTGAATTTGACAAACACAGATTTTGGCAACCAACCCCTAATGGGGCTT AATGCTATGGGGCAAGATCACCTATAATGGGGGATTTCAATGCGGGAATTTGGCTTTGATAACGTTGGATAG CAATGGCGCAACCACTTACGAGTAACCTTCAACAATAACGGCGGCTCACTTATAAGGGTGGGAATGGTATTG GGGGAGCATCACTTCACTAACTCTAATATCAATCAATACAACTCAATCTTAACGCTAATAGCGTTACCTTTAATAA CAGTCTTTAGGGAGTATGCCTAATGGCAACGCTAATACCTAATACCTGATGCTCATGTTAATTTCAAGGCACAAC TTTTAATAATTTGACCTTTAATGGGGATGTTTGTCAATATGACCGGTAAGTTACTTAACTCTAATGCGATTTTAACTT ACGATCAACAACCCCACTTGGCTTTTGTCAATATGACCGGTAAGTTACTTAACTCTAATGCGATTTTAACTT AAAATTACACGCTAGTATAGGGAGCGCTTACGCTCTTTAGCATGAAATGGCTCTATCACCTATAATGATGTCA ATACTTATGGAATATCATCAGGCTTAAACACGCAAGCCACAAAGACGCTGATAAAATCATAAGTTCAATA ACAACACCCACACTTACTATGTAACCTACAATTTAGCGGCACGCTTATAATTTAGACACAAATTTTAGCCCTGATTC TATTGTTTTGCAATCTGTCTATTATGGCGGAACAATCTTTACTACACCAATAGCGTGAATATCCATGATAATGTTTT AATTTAAA	102	FKAKDIFTGAVGSGNEWKTTGGGAILV FESSNELSANGAYFQNNRAGTQTSWIS NLISNNSVNLNTDFGNQTPNGGFNA MGRKITYNGGIVNGGNI:GFDNVDNCL ATTISGVTNNNGALTYKGGNGIGGSIT FTNSNINHYKLNLANANSVTFNNSALGS MPNGNANTIGNAYILNANITFNNTFN GGWVFVNIPDAHVNFIQ3TTTINNPTSP FVNMTGKVTINPNAIFNIQNTPTSIGSA YTLFSMKNGSITYNDVNNLWNIIRLKN QATKADKNHTSSNNHTHTYVVTYNL GGTLYNFRQIFSPDSIVLQSVYYGANN LYYTNSVNIHDNVFNLN
HP1542	103	CGCTTTTATAGTGCAATTAAGGCTAATGGATTAGTGGAATTTTCAAAAGTTTACAAAATACTACGATCGGGACTTTA GATTTAGGGCCAAACGCTACTTTTAAAGCGAATCAATTTGATCGTGAATAACGCTTTTAAACAATACTAATTACAGG GCTGATATTAGCGGTAATCTCAATGTGTTAAAGGAGCGGCTCTCAGCACGAATGAAATGTTTGAATGTGGGG GCGATTTCAAGAGCGGAAGGTCATTAATCTTAACTTAACAATAAACCAATCAACGATTTAATGTTGCTGGCA ATCTACGATCATGCTTATAACAATCAAGCTTTAATCCATTTTAACTCAAGCAAGCGCTTACACGCTTAT TAATGCGAAACGCATGCTTTATGTTATGACCAATCAATCATTCGTGGAGGAGCTTGAGCGATTACCTCAAGCTTTA CACCTCATTTGATTTAAGCGCAACCGCATGCAATTAACGGCGATTCA	104	AFLGAIKANGLVDFSKVLQNTTIGTLDL GPNATFKANHLIVNNAFINNNSNYRADI SGNLNVKGAALSTNENGLNVGGDFK SEGSLIFNLNKNQNTINVAGNSTIMS YNNQALHFNTQLKQGA'TLINAKRML YGYDNIIRGGSLSDYLKLYTLIDFNGK RMQLNGDS
HP1542	105	AGGGGGCATTGCTATGATTGAAAGCTAATAACATTTTCAATAACTCTCAATGGTTATTGATGTGCTAAGAAAT GTGAATCAGTCATCATTGAATGGGAATGTTACTTTCAATAATCCAGGCTTTCAGTCAAGCCCAATGCGGCTATTAAT ATTGGGGATAGCCAAACCAACGGCTTTAGAAACGCTTCAAGCCTTCTTTTACAAACACAGCGTGGCGAATTTT AACGGCACAAACGCTTTTAAACGGGGTGTCTTATTTGAATTTGAACCCCTAACGCTCAAGTAAGCTTCAATCAAGTAAAT TTCAATAACGCTAATGTAACCTTTTATGGCATTCTTATTTGGTAAACCGCTGATTTTGGCAACTCTGCACGCTTA TCAATTTCAAGGGAATACGAATTTTAAACAGCCACGCTCAATTTAAGGGCTAAATAATCCATATCAATTTCCAAGG CGTTTCTACTTTTAAACAAACTCTACGATGAATTTAGCTGAAAGTTCCCAAGCGCTTTAAGCTCTTAAAGTGGA AGGGAAACGAATTTCAATCTCAATAACTCAAGCTTGTGAATTTCAATGGCAATAGCGTTTCAACGCTCCTGTGAG TTTTATGCTAATCTCAAAATTTCTTCACTAAATAGCGACTTTTAACTTCAAGCTTCTTTTGAATTAAGCAACAA CAGCACCTGAATTTTCAAGCGTCTTTTAAATGGTGTCTAAACCTTTTAGGCAATGGCAGTAACAATCTAGCGAT CAACGCTAAAGGGAATTTAGTTTGGGTCTAAAGGATTTTGAATCTGTCTTATATGAATCTATTTGGGGGGGATAA AAAACTTCCGTTTATGATGTGTTGCAAGCCCAAAATATTGATGGCTTAATGGGGAATAACGGCTATGAGAAAGATCCG TTTTATGGCATACAGATTGACAAAGGCTGATTACTCGTTTGATAACGGCGTTCTTCTGGAGATTCACTAACCCCGT CAAT	106	GGIRYDLKANIIFFNNSQI/VIDVSKNVN QSSLNGNVTFNNSRLSVK/PNAAINIGD SQTQTALENASSLSFYNNISVANFNGTT AFNGVSYLNLNPNNAQVSI:NQVNFNNA NVTFYGIPLFGKTPDFGNSARLINFKN TNFNQATLNLRAKNIHINFQGVSTFKQ NSTMNLAESSQASFNALIVEGETNFNL NNSLLNFNGNSVFNAPI/SFYANHSQI SFTKLATFNSDASFDLSN'NSTLNFQSV LLNGALNLLGNGSNLAINAKGNFSFG SKGILNLSYMNLFGGDKKTSVYDVLQA QNIDGLMGNGYKIRFYGIQIDKADY SFDNGVHWSRFTNPLNTTETITELHN NRLKVQISQNGVSNKMFNLA'PSLYDY QKNPYNETENSINYTSDKVGTYLTS NIKGFNQNNKTPGTYNACNQPLQALHI YNQA

HP1542	107	TTTGGATGGGATTTCGCTCGGCTAGGCTATTGTGTTTATTATTCGTTTAAAGCGCTCTTAAATCTCTGAAAA GCCTTATCCAAAGCAGTATTGCAACCGCTAAGATAAAATCACCTCTTTAAAGAAATTTAAAGTCATCGCCATTACC GGAAGCTTTGGAAACACGACCAAAATTTCTGCTTCAATCTTACAAACCAATTTCAACGCGCATGCAAGCCC CAAAAGCGTCAATACCTTTTAGGCTTGCAGATGATTAATCAGAAATTTAGACGATAGGAGTGAATCTATATCGC TGAAGCCGGGCAAGGATTAAGGCGATATTAAAGAAATCACCTGTCTCATTTGAACCGCACCTTGTGTGTTGCAG AAGTGGCGGAACAGCATTTAGAATACTTTAAACTTTAGAAATATTTCGAGACTAAAGCGGAATTTGGATTCCA AACGCTTAGAAAGGCTTTTGTACTCGGTGGAAGATCAAGCCCTATGCCCTAAAGATAGCCCTTTAATAGACT ATTCTAGCCTGTTAAACATCCCAATCCACTTTAAAGGCACTTCTTTGAATGCTTATAGTAGCGTTTGGGAA GATTTGAACAAAGGTTCTAGGGAGTTTAGCGCTTATAATATCGCTTCAAGCAATTTAATCGCTAAGCATTTAGGCT TAGAGACCGAAGGATCAACGCTTTGTTTAGAACTCAACCTTATGCTCATGTTTGAACCTTTTGAAGTGAATC AAAAATCATCATAGCAGTAGCTTTAATGGGAATTTAAAGGCGATGTTAGAGGCGATTCGTTAGCGAGTTTGCACA AAGGCGTAAAGTCATTGTAAACCGGCTTAGTGGAAGCAATACAGAAAGTAATAGGCTTTAGCGCAAAATA GACGGGTTTGTGATGTCGCTATCATCAGGGGAGTTGAATTCACAAACGATTGCTTCACAATTGAAAAACCCCCA AAAAATCTTACTC	108	LDGSLALGYLCIFIVLSASLSEKALS KOYLQAKDKITSLKNLKVIAITGSFGK STKNFLQILOTTFNHAHSPKSVNTLLC LANDINQNLDDRSEIYAEAGARNKGD KEITCLIEPHLVVAEVGEQHLEYFKTL ENICETKAELLDSKRLEKAFICYVEKIK PYAPKDSPLIDYSSLVKNIQSTLKGTSF EMLIGSVWERFETKVLGEFSAYNIASAI LIAKHLGLETERIKRLVLELNPIAHRLQL LEVNQIIDDSEFNGNLKGMLEGIRLASL HKGRKVIVTPGLVESNTESNEALAQKI DGVFDVAITGELNSKTIASQLKTPQKIL LKDKAQLLENILQATTIQQGDLILFANDAP NYI
HP1542	109	AAATCTTGAAGTCATTACCTATACACTGAAGGCATCACAAACCCCATGCTCTTGGGATGGCGCTATCTT TTTGATTGGAGCGATTGGCTTTAAGGTTCTTTGGTGCCTTTTATACCTGGATGCTGTATGAGGGCAATAA CCCGTCTTTGGAGCTATATTCATTGTCCTAAATCGCGGCTTTGTGTAGCGACTCGCCTTTTGTG	110	NLEVTLYLHTEGITHNPMFLAMGAIFLIG AIGFKVSLVPFHTWMPDVYEGNNPVF ASYISIVPKIAGFWVATRLF
HP1542	111	CCACAAACAAACATGCCAAACACGAAATACGCCCAAGAGAAATGGATAGCAACAAAGTAGAGGCGGTACGG AAATTTGCGATGTGAATGAGAGAGGACTTTAGGCTTTTCAAGAGGATTAAGAAAGGCGGTTGAAGCGAATAACAAG ATCCAAGTGAGCATTTAAACCCGCTTATAAGATGAATTAACCTTAAAGCGAGGCTTAAATCACGCCCTTTAGGG GGCTTGGTGAGATTGGGGGAACATGATGCTTAAAGGCGGATGTTAGAGGCGATTCGTTGATGCGGCGCATGA GCTTCCCTAAAGAGGGGCTCTTTGGCGTGATATTTAATCCGGATTTTCTACTTGCACCAATCAAGGACAAAA TCGCTGGCATTATCATCACCCTGCCCCATGAAGATCACATAGGGGCGGCTTATTTGTTTAAAGAGCTGCAATTC CCCCCTTATGGCAGCGCTTGAATTTGGGCTGATTGGAGCAAGTTGATGAACATGGTTGAAAAAATACCGCTC GTATTTAAATCGTAGAAAGCGCTGCTCCATTAGCGTGGCGAATTTATGAATG	112	HKQKHAKTRNYAQEELDSENKVEGVTEI LHVNERGTLGFHKELKKGVEANNKIQV EHLNPHYKMNLSKASVKITPLGGLGE IGGNMVIETPKSAIVIDAGMSPKEGL FGVDILIPDFSYLHQIKDKIAGIITHAHE DHIGATPYLFKELQFPLYGTPLSLGLIG SKFDEHGLKKYRSYFKIVEKRCPISVG EFIIE
HP1542	113	AATCTTTGATAACAATAAATCGGCTAATGCAAAACAGGACCGGCTATCATCGCTCAAGGCACAAAAATAA GGGGAGCTTCAATTTAGATTACCATTTGCAGTAGATGGCGAATTAGAAGGGTGTGCTATCTAAAGCACCGGTG GTGATCGGCAACCGGCTCGGTAGTGGTGAGATTTTACTAATAAATTAGTGGTCAAGTGGCAAGTTCACTGGCAC GGTGGAGCGGGAAGTGTAGAAATCATGCTTTAGGCGACCTTGTATGCAAAATCTAGCCAGAGCTTGTGGTG GAAAGAAAGGGGATTTGATTGGGAAACTCGCCCTAAGAAATTTCAAGGGGGCGGCTTGTAAATCAATGAGCAAG AAAAGAAATTTGAAATAAATAGGGAATGATCCCAATCCAGCTTTATAGAGCTTAAACAAAGGCTTTGATTACCAAT ACTCGCTTTAAGGATTTAAGAAATCCGAGCTCGCTAAGAAAGTCAAGCTATTTAAGCCAAATACCAAGCCAT TCTTTCCCGGAGTTAGGGCTAAAGAAACGACGATTTGCGTCTGTTTTTGAAGAAATTTTACAGCTTTTAGGGGG TTTAAAGGAGTTTATCAAGCTTAGAAACAAAGCAAGCAATCATCATATTGCCCGGATTAGCGGCTTTATGACCCC TTTACCTAAAGAAAGCTTTTGAAGCTTTTAAATCACTCTTTTGAAGAAATATAACCTTAAGGATTTGAAGACAAAGC TCTTTTATTATGGCTATGAAATTTTAGACTTAGTGAAGTGAAGCGGAAAGCTTTAGGGGGGATTTGTGGAT ATTTATGCGGCAAAATTTAAGCGTATCGCTTGAATTTTGTAGAAATTTGAAATCCCGGCTTTTATGTTGGAAGCAATCATCTT ATAAGGATCTAAAA	114	IFDNNKNSAKTGPATIAQGTIKIGE LHLDYHLHVDGELEGVWHSKSTVIGQ TGSVVGEIFTNKLWVGKFTGTVEAEV VEIMPLGHLDGKISSQELVVERKGILIG ETRPKNIQGGALLINEQEKIENK

HP0452	115	TAGAAGTTATTGGATTAAAGAGACAAGCATGAACGATTGCAGCAAGAAATCACCGAATTCGAAAGCAAGAATGTGC GCTTGCAAAAGCGTTTGTGAGTTGAAGGAATTACGGCTAGAGATTAGATTTAAGGAAATGTTAGTGTAAAAA GATGATAGGTTGGTGGTGGTAAAGCGTTTATTGGCTAGAGACAACCCCTTTGAGCCTGAAATCAATCCCAAGAA TTTGCAAGGGGGCTTTAATGGGATCTATGATAGTTATTTAAAGAAATCCATGTGATTTGCCACGAGCGCTAGGAT CTTAAACAATACGCTCACTTACCAAGATATTGATGGCTCTATCCATTCTAAAGTCGTGGCATTTGATAAGGCAT TGATTGGCATTACCCCTTAAACTCTCCCAACACACCCCTTGATCCAGCCCTTTGAAAAACGCTACCGATCCAAGA CTTTGATTTTAAATGGCAAGCAACGATGATTTTGGCTCCCTTATAAAATTTACGCTCCTTTGTGCTAGTCAAT CCTTATAGAAATCGTTAGACACGCAAAAGGCCCTTTGGATATTATCAAAACATGGATTTAAACCAAGATTTT CTCACATTAAAGTCGGCAGCACAAAGATTATACCGCAT	116	EVYLDLRDKHERLQQEITELQSKNRL QKRLFELKELRPD
HP0452	117	AGTGTTCAAGACAGCAAAAGAGCGTTGCGGTTTCATCTATGAGATCAGCGAGTTCATGAAAGCCTATACCGCA TTGCTAAAAAACAAGACCGATACGTCATTTATTGAGGTATCTCCCTCTAGGTATTGGCCAGCATTTTAAACGACT GCCCTTATGTCAAATACCCCTGATTTGACGCTTTGAAAAGCTTTTGGTGCTTATTATACCAAACCTGGATTGCAG GAGGCAGATCAGCGCATCAAGCAAAACCGATATCAACATTATCAAAACGTTAAAGCAATTAAGAGCGTTGAAACC ATCAAGAGCTTATATTGAATAGCATCGACTCTTATAACACCTTTGATCAATACCTCTATAACTTATGGGATAGCTCTT CTGTTTATCATAGCAATGGTGCGTCTGTCTTAGCCCTAGCTAATTTATTCATGSCAGATGAAGAGAAACCCCAT TTATCGCTATGGATGCCGAACCCCAAGTGGAGCATATTGTCACAAACGCCCAAGAGAGCGAGTCAATGGAACGC GGATTTTGACAAAGAAAAAGAGAAGATGGTAAATAATATCGGAAATTAACCCCTTTAAAGCGTAAAA	118	VFKSKKDACGFIYEISEIFMKAYTALLK KQDRYVYLLRYLPSPRYWASILTALYV KYPDFDALKKLLVSYYYCTWIAGGTITR IKQTSINIKNVKSNSKSVETIKELILNSIDS YNTFDQYLYNLWDSSSVYHSHKWWRPV LALANYFMADEEKPHFIAVDAETQVEH ILPQTPKRGSQWNADFQKEKREEWVN NIANLTLLKRK
HP0452	119	GAACAAATTGCAAGAAACAGATAATTTATTAACACATTGAATGTGAATCGCTTTAGAAGCCTTGCTGTTTATACG CCCAAGGCTATAAGATTTAAATTTATTAGAGCGTTTGAACGGCTTGAGCGGCTTTTAGAAGTGGGTATTTTA GAGAAAGAACTACGCCAAAGTTTAAAGATTTTCCCTATTCCAACGATTTTACAAATTTAGAGCTTGTTTTT TCAATTACAGCGCTTCCATCACAGCCAGTTTAAACCGCGAGAGTTTGTTTATTTATGTTAAATTAGAGCAAGCT CTTTAATCAAGCTTATATCATTAACACGCTTAAATCATTAACCAATTTGTAAATTTCTTTAATTTTAAAAAAAGTTA AAATCATAAAAAATACAAGAAATTTACAAAACTCATTTCTTAGAAAAATTTAAAAAGGAAGCGCTTAAAGAGAA TATCGCGCATTTATTGTTAGAAATCTTTTCCACCGCGCATTTTGTCAAGGATTTGAACGCAATAAAATTTTCT TCACAAATTTAATGTCATTAATACATTGAATGCTTTTATGAAAAATTTAGAGCGCAAAATTTGCAATTTGG CGCTAAATCGCATGCCCAATAATAACGAGCGCTTGAAAGCGTTTATCGCTTCTTACCCCTTAAACTCACACGCGA TCAACAAACGCCATTA	120	NKLQETDNLKTLNVKSLLEALLVYTPK GYKDLNLLERFETGLSGVLEVIGILEKR NYAKVLKIFAYSKRFYKNI.ELVFFNYSA FHHQFKTGESLFIYKGLIEQSSFNQAYI INTPKIITKFGKISLIFKVKVKNHKIQENL QKLISLENLKKEGVKENIAHLLLEIFFPT PHFVKDFETNKNFSPQHLNALKYIEML FYMKNLERKKLQFGAKIACPNNNERLK AFIASLPFKLTRDQQNAI
HP0336	121	ATGGATGGAGGTTTGAAGATCCTAATCTAACCCCTTTAGAAGTCTTTGATAGATCCATCAATAAAAAATCGTAGC GTGCATTTAGCGGATAAGGAAGCGATTTTAAAGCCCTAGAAGTGGCTAAAGCGATAGAGCCGTTTCAGTCAAAA AAGCTTTACAGAAATCCATGCCCTTAATGAGTCAAAACGCCAGCTTTTAGAGAAAGAGAGCGGATTTGATAGGGA TTTCCGCTTTAGAAGTGGTAAGACTTTGCTGAACGGGACGCTGAAGTGAGCGCAAGCTTTTATAGAGTTT TACCCCTACAGCTTAAGGGTTGCAAGAGCAAAACACAAAAACGCAATTCACCCCTAAAGCGGTGGCGTGGTCAT TGCCCCATGGAATTTCCCTGTGGCATTTCTGTAGGCATCTCGCTGCCCTAGCTACGGGCAATCGGGTGATTT ACAAGCCCTCAAGTTTGTCTAGCGTAACGGGCTATAAGCTTTGTGAGTGTCTTTGGGATCGGGCGTGCCTA	122	MDGRFEDPNLTPLFVDFRIHHKIASV HLADKEAILKALEVAKSDKSRFSQKSFT EIHALMSQTAQLFRERRGDLIGISALEV GKTFAETDAEVSEADFLFYPYSLRVL QEONTKTQFTPKGVGW/APWNFPVGI SVGTIAAPLATGNRVIYKFSLSLSSVTGY KLCECFWDAGVP
HP0336	123	CAACAATGGGGGCATCAAAACACCAACCAAGATGAGTATCCCTAAAGCCCTGATGATTTCAAACTTTTATCAA AAAAATCCATAGAGATTTAACCAAGAAATCTCGTGCCGTAGAGCATAAATCTATAATGGCGAGAGCCCTTTAGA AATGCCTAACACCCCTTAAGGCCAATGAATGCGTTTGATCTGGCAAGAGCGGATTTAGCAAAAGGACTTGA TGGTTGGGTTTGAATAAGCAATCGATTTGTTGGTGAGTCAAGATTTAAGCGCTCGCATCGCCCTGATGAAG CTTTTCCGCTCAAAATTTCAAGACTGCCAACAAAGAGTTGCTCTTCTACAACGCCGAAAAACGCCCTTGCAAGAGAACTT GATGAGTTGAAAAAACACCATCACGCCCTCATGCAAGGCCCTTAGGGAGCGTTTGGACACCGCTATGAATCCTAA TAGCGTGCTTGTGATAGACAATCTCAACGAAGCCAAAGAGTTGCACGACAAATAGGGGTGGAATAATTAAGATCGT TTTTAGAAAAAGCCACAGACAACGAGCA	124	INGGHQKHHTKMSIPKAIPDDFKPFKK IHRDFNQRLVPVEHKIYNGEKPLEMP NTLKANEMRLHLGKEADYEQKDLMVG FENSESHLLWSQDLSARIALMKLFAQ NFKTANKELLYNAEKRLARELDELKK HHITPMQGPLGSLDAM/NPNSVLVID NLNEAKELHDKIGVEKLRGFLKATDN E

HP0336	125	CCCTTATAGCGAATACCTGTTGGTGTAGAACGCTGAAACGCACTGTGAGATGCTAGGAATTGAATTGCTTGAGG GCGATTATGAATTAAGAAATTTTAGATAAAGCTAAGGTAAGGAATTTAGGGGAAAGAAAGCGAACGCTGTTTTG AGTGCTTTGATTACGCTTAGAAGCGAGTGCTAAGAGCTTTGAATAGGGAAGAAATTCACCAACACCTTAC TCACAAAGCCCTAAAGAAAGACCTAACCGCTCATCGTAAGGGCAGAGCATCGCGAAAGGCACAAATTTGGAATTT GTCGTGTTAGAAACGATAATTTGAACATTTTAAGAGCGAGTTGATTAACCTTGCAAGCTTTGGCGAGAGAAAC GAGCTTTATCGGCAAAATTAATGCGGTTGCCAATTCGCTTAAATCCAAAGAAATCCCAAAACAGAACGCCCTTT GAGCTTTACTCGCTTTAAACGCCAGATTTACCGCAAGTATTGAAGAAAGAACGCAAGTTTTTAGAACATTAGAC ATGGCTAAAGAGCGCTAATAAGCCTTTTAGCCCAAAACGATCGCAACTTACCGCTTATTAAATGGAGGCGTG TGGCTTTCTAAAAATCAACCCCTTGAAATGCTGCTGCGCGCTCTAAAGTAAGGCTAAAGTTA	126	PYSEYLLRLLEDVKRTCEMLGIELLEG YELEKFLDKAKGKELLGEKSERCFE DLRLEASALKAFELGEEKFTTLLTSIG KOPNQLIAKGQSIQQRHNLFEVFRNG NFEHFKSELDLNLQALARENELYRQI CGCQFALKIQESQNRSPFELYSPH QILPASIEERTQVFRITLDMAKKDANKPF LAQKTIATYRLNNGGWLSKNSNPLNC CILARSKSKAKV
HP0336	127	CGCGCGCCCTCCTTATAGTTGGCGTATTCCTTGCGCCACAACCGATTGCTCCCTAGAGATTATTAGGGTATCGTT CTTTGGCGGAAGAAATTTCCATTTTAAACCCCAAGACTATGACAGCTGGCAAGAAAGCGGATACAGAAATTTTAC GCCAAGCTGCAAGAGAGCAAAATATTTGTTTCAATTAAGGGGTGGGATTTTGGCTACCAAGAGAGCTTTCTA AACTCATGGAAGTTTGTGATTGAAAGCTCATGCAAGGTTTACGATTGGCGGATTTAATGGATTATTGCTATAA TGATGATCCACGATTGAGCGGTGTAAGAGCTAAAGAGGATAAATGATGACCATCAACACCCATTACACCCCTAATTC ACGAGCTCCAAACCTTGAACAATATCAATATGACGCAACCATAAAGGACAGGAATCAAGTAGAGCAGGATTTACA ACAAAGCAATATTCAAGATGTTTCAGCCCAAGATAATGCGAAACGCCCTGATTTGACCGATTACAAGCTTTAA CGCTATCAATAACGATGGCGAGATTAAAGATAGATCCCAAGTTGAGAAACCTTGCTAGTGGCGAAATATCCCTG AAATTTATCCAGCTAGACACATACGCTTAAAGAGGGTTTACCATTCTTTAAAGCCATTTGATCGCTTCTATCA CGCAATCAATCCGACCGCCCAACTAAAGCCAGTATTTGTGCACGTAATGTATTCTAATTTGCTTAGCCCTTAATT CG	128	ARPPYSLAYSLRHNRLPRDYLGYRSL GEEISIFNPKDYDSWQERADTEILRQL QESKKYFVFIKGGGIFAYHRELSKME VFDLIENSCKVLRGLDLMDCYNDPR LSV
HP0336	129	CTACCTTAAGCCTGAAGAATTAAGGCTCTATACCTTAATTTACAAACGCTTTTAGCTTCTCAAATGCAAGACGCTCT TTTGAAAGCCAAAGCGTGGTTGTGCTTGCAGAAAGCGAGTTAAAGCGAGTGGGAGAAAGCTCTTTTGTATG GCTATTATAAAATTTAGGCAATGACGATAAGGACAAATTTGCTCCCAATTTGAAAGAAATGACCCCATTAATTAAGA AAACTAGAGAGCAACGCCCATGTTACAGAACCTCCAGCACGCTATTCTGAAGCGAGCTTGATTAAGTTTTAGAAA GTTTAGGCATAGGCAAGGCCAGCCCTACGCCCAACGATTTCCCTTTTACAAACAGAGACTACATCAAGGTAGAA AAAAAGCAATCAGTGCTTTAGAGAGCGCTTTTAAGGTGATAGAAATTTAGAAAGCATTTTGAAGAAATCGTGGAT TCCAAATTCAGCGCTCTTTAGAAAGAAATTTGACAAATATCGCTCAAAATAAAGCCGACTACCAAGCTCTTAAAG GACTTTTACTACCCCTTTATGGATAAAATTTGAAGCTGGGAAAGAAATATCATCTCAAAAGTGCATGAAACAAAC GGTCAATCATGCCCTAATGCGGTGGGAAATAGTCAAAAGAAATAGCCGTTATGGGAGTTTATCGCTTGCAACAA TTACCTTAATGCAATATGTCAACAAACTGAAGCGCTAATGATGAAGCCGATCAAGAAATTTGTGCGAAAAATGCG GAGGGAAATGTTGCAAAATTCAGCAGAAACGGGGCTTTTAGCT	130	YLPKEELRLTYLYKRFLASQMDALFE SQSVVACEKGEFKASGRKLLFDGY KILGNDOKDKLLPNLKENDPKLEKLES NAHVTEPPARYSEASLIKVLESIGIRP STYAPTISLLQNRDYIKVEKKQISALESA FKVIELEKHFEIEIVDSKFSASLEELD IAQNKADYQQVLKDFYYPFMDKIEAGK KNIISQKVHEKTGQSCPKCGGELVKKN SRYGFIACNNYPKCKYVKQTESANDE ADQELCEKCGGEMVQKFSRNGAFLA
HP0336	131	CCAGAAGGTTGCTATCATTGCCATTCCAGCTTATCGCCCTTCCAAAGCTGAGGTGATCGATGCGCGGTATA GTTTGAGTGGGAATACCGGTATGACAGGCCATTTTGTGGGTTCTAAAGGATTGGCCCTGATTTGCACAGGGTA GGGGATTATCGCACAAACCGATTGGCATGAAAGCACATGTTTGATCCTAAAGCGTTGTGCGCACAGCATCATGCC CGCTATAAGCATTTATTAACAAAGAGCGGATTTGACACCGCTTATGCAAGAGCTTTGACGCAAAAGGTTTT TGCGTGCTTATGACACAGAAACGGCGTGAAATTAGGGAGCGTAGAAGAGCGAAAGCCCTATTAGAAAGAA GCTAAAAATCACAGCGGATATGAAGACAGAGGGTGTAGAGCGGATTGAGAGAGGTGAAGTGTAGAAATGT GGCTTTGATCGCTTATTGAATAGCTTGGGTAATTCAGGATCAACGCCAATCAAAACGCTAAATAGGGTGAATG ATGGATTAGAAAGTTTGAGAGGTTTGGCTATGCGTTTACCATTCTTTTACGCTCTTTTGTATGCGCTATATTT TAGCATGTATAGAAAGCAAAAGGCAATATGGATTATGAGCGATACGGTAAATGATGCTTTAGA AGACGAGTTGATTGAACACCGCCATAAAAGTTTCATGATAATGGCAAGTTGAATGGATTTTAAACG ACCATATAATGTTTGGCTTGTAGCGCTTGTGATTTAGTTTTAACCATCTATGAATCCAGTTCGCTCATTA AGAAATGCGGACAGCAATCTCAAGTGAGCTGTAGAAATGGCATTTGATTGATGGGATAGGGAGTTTGGC AATAATGTGCGAGTAGGCTGGATCGCAAGCTTATGTGCACGATTGTGGGCTTTTGGTATTCTTCTTTGGGTAT CCGCTGAATAGCTTT	132	QEGCYHCHSQRPFQAEVDRYGAYS LSGEYAYDRPFLWGSKRIGPDLHRVG DYRTTDWHEKHMFDPKSVPHSMPA YKHLFTTKSDFDYAEALTQKKVFGV PYDTENGVKLGVSVEEAKKAYLEEAKL TADMKDKRVLEAIERGEVLEIVALIAYL NSLGNRINANQNAK

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HP0336	133	TAGCGTGATCAAAACACCATTTAATAGGGCTTGAAGCGATCAATCAAGCTTTTGTAGATGAGAGGTTAAGGGCTTTAGACGGCACGCTAATTACGCTAATTTAGGGCGAAGCTGTTTGGGGTTCTATGGCTTAGCAAGGGCTAGCGCAAGGCTTTAAATCTGCCATTATACCGCTATTAGGGGGGCTAACGCTCTGACTTGGCTGTGCCGATGCTCAATATCATCAACGGCGAAGCATGCGAATAATCCATAGACTTCAAGAAATACATGATCATGCCCTTAGGGTTGAAAAGTTTAAAGAAAGCTTTAAGAGCGGAGCGAGAGTCTATCACACGCTTAAAAAATTTAGATGGGAAGAAATCAGCTCACAAAGCTGGCGATGAGGGGGCTTTCGCCCTAATTTAGCAACAATGTAGAACCCCTTGAAGTCAATTTCTCAAGCCCATTTGAAAAGCCGCTATAAATTAGGCGAAGAAATAGCGCTCGCTTAGATGTAGCGAGCAGCGAAATTTGGTGATGAAATTTCAATTACCATTTAAAGGGTGAAATAAGATTTAGATTCGATGAATTTGGTGGCTTATTATAAGAGTTGGTGCGAAAATACCCGATTGTATCCATTGAAGATGGTTGAGCGAAGACGATTGGGAGGTTGGCGCTTTTAAAGCAAGGAATAGGGCGTCAGATCGAGTTAGTGGCGGATGATTTGTTTGTAAACGAACGCAAGTCTCTTGCAAAAAGGCATTGAAAAAATATTGCGAAGCGCGCTTTT	134	SVIKHHLGLEAINQAFVDERLRALDGP PNYANLGANAVLGV3MALARASAKA NLPLYRLGGANALTLPVPMNLNING HANNIDFQEYMIMFLGFESFKEALR SAEVYHTLKLDDGKNQLTSVGDEG FAPNFSNNVEPLEVISOAIEKAGYKLC EIALALDVASSELVDENFNHYHLKGENKI LDOSHELVAAYKELVAKYPIVSIEDGLSE DDWEGWAFLSKELGRQIQLVGDDLFV TNASLLQKGIEKNIANAV
HP0336	135	AACCGCTTGGGGGTAATCTGTGAGTGAAGCGGTGGTGGCTGGCATGATCATTTGGGATTATTTTGGCTCGCATTTGTTAGAACGCGCAAAATTGAAATCAACACGCAAAAGTTGAAGCTTTTCAATTAAGAAAGCCAAAGACTATATGCAATTTTATTGCATAATGAAGGCAAAAGAGATGTGTATGAAATTAGAGAGCGCATGAAGAAGTCATGGATGAAAAAGTGGGCGTTTTTAGAGAAAGGCAAAAGGCTAGAAAGCCCTTAA	136	NRLGNSVSEAVVAGMIIGDYFASHCL EAQIEINTQKVEAFIKESQDYMHLHN EGKEDVYEIRERMKIEVMDEKVGVFRE GKRLEAL
HP0336	137	GAACGCTGTTGGAGCGGCGGAATTTAGGGTTAAAAAACGATGAAGGGTTTAAACTTGCAAGCGCATGAGCCTTTTTAGAAAAAGAGTCATTTTAGCCTATTAGAACCCACCAAAACGCCCTTTCATGGGACTTGCGCTAAAGTTATTGATGAAGAGCGGCAAAAGCCCAATTTAGTCAAGGTGTTTAGATAGCCAAATAACGCCCTTGTAATTTTCGGCTCCCTTATCCCTTTTAGGAGATTTTGATGCGAAACGCCAAACCCCTTTTAGGGCATATCGGTATTTATGGCTTCCACAATAAAGAAATATTAGAAAGATTTGCGCTTTTAAACCTTGCGTTTAGAGGAAATAGAAAAATTAGAGCAAATAAGGGCTTTGTATTACCAAAAAAGAGATTGCAGTGAAATCGTTCAAAGTGAAAGCGTGGCATTGACACCCCAAGAAGATTTGCAAAACGCTTTTGAAAAATTTTAGCCCGCATCTCCTTGAGCGGTGAAATTTAAAAATACTCAAAACATTTTTCACATCAAAAAACCTTTTTTTTAAATCCAAAAAAGCAAAATTTCTTAATTTTGTCTCAATTTTATTAATAAATTCATAAATTTATGGCACAAATTTAAACCTATTGTAATAAAGTTTCAATTTGATACGATTTTACAAACAAACATTACTTTAAGGAAATTTTATGAAAAAACGATTTTACTTTCTCTTATGTTTCTCATCGCTCGCTGAAAAATGACGG	138	ERCLEAARILGLKNDERVLNLQGDEPF LEKEVILALLEATKNAPFMATCAKVIDE EQAQSPNLVKVLD3QNNALYFSRSLI PFLRDFDAKRQTPLLGHIGYGFHNKEI LEELCALKPCVLEEIEKLEQLRALYYQK KIAVKIVQSESVGIDTQEDLQNALKIFSP DILLER
HP0336	139	GATGGCTACGCTATAGGCGTTAGCGGTGGGGAAGCGCTGATGAAATGCTAGAAACCATCGCGCACACCGCCCCCTTGCTCCCCAAGACAGCCTCGCTACTTAATGGCGTAGGCACGCTGAAAAATATCCTAGACGCTATCAGTTTGGGGTGATATGTTGATTGCGTGATGCCCCACCCAGAAACGCCAGAAACGCCACCTTTTCACGCTTCTGGCAAAATTTCTATCAAAAACGCGCCCTATAAATTGGATAATACCCCTATTGAAGAAATTCGGCATGTTATGCTTGCAAAACGCTATTCTAAAGCCTATTTGCACCATTTATTAGGGCTAAAGAACTCACTTACGCTCGTTTGCCAGCTTGCAACAATTTGCATTTTATTAGAGCTGGTGAAGACGCCAGAAACGCCATTTTAGAAAGCGGTTTTTGAAGTTTTAAAAAAGAAATTTTGGAGAAATACAACTCCGCTCTCATTGAATGATGGAATGCAAAAAATACTAAAAAGCGTTTTTTACCATCAATAAAAGTTTTCCTTAAAAATAAGGCTTTAGTTTTTAAATTTTGAATTAACCAAAACCCCTATCTTTGATAAATCTCAGGGTGGTGCTTTTAAAAACGCTATGGAACCAAAAAATAACTTTCCGGGTGGTTTCTAATCACCTCTTCGCACAAACCTCGCTTGGGCTTGGGTGCATTTCTAAAAATATCGTTTTTGGCGGTTATCGGTGATTTGAGAGCGGATACCTCGGATAATAGGTCGCTGTATAATGCGAATAATCGTCATTA	140	DGYAIGGLAVGESADIEMLETIAHTAPLL PKDKPRYLMGVGTPENILDASLGVDM FDCVMPTRNARNATLFTHSKISIKNA PYKLDNTPIEENCAC YACKRYSKAYLH HLFRAKELTYARLASLHNLHFYLELVKN ARNAILEKRFLSFKKEFLEKYNSRSH

HP0336	141	TAAATCATGGAGTTGTCACAGCATTAAATGATTTCAATGAAGCTAAGCAGGTGATCGCTGGGGGGTCAATTACAC CTGTTAGGGCGTTAAGAGCGTTAAAGGCACTCCCCCTTTATTTAAAGGCAAGGGGGCTATCTTTATGATGTG GATAACAACCATTTATAGATTTGTGCAAGCTGGGGCTTTGATTTTGGCATGCTGATGAAGAGATTGAAGAA AATATTATTAAATGATTAAAAAGGCACCTCTTTGGCGCTCCACAGAAATAGAAACCACTTTAGCTAAGGAAATCA TTTCTTGTATGAAGCTTAGATAAGGTGCGTTTAGTCAGTGGCACAGAAAGCAGCATGAGCGCGATACGACTC GCTAGAGCTTAGCCCAAAAGATGATTTGATCAAGTTTGAAGGTTGCTACCATGGCATAGCGACTCCTTATTGGT GAAAGCGGTAGCGGTGCTACTTTTGGATCGCTTCTTAGCGGTGCGCAACGATTTTAGCAAAACACACTC TAGTGGCTCGTTAACGATTTAACTCCACAGAAAGATGCTTTAAAAAGGCAATGTGGTTGCGTCATCATTTGAAC CCATTGCCGGGAATATGGGTTAGTCCCGCTCAAAAGAGTTTTTATGGCTTAAAGGCTTGTGTGAAATAAC CAAGCGGTGCTGATTTAGATGAAGTATGAGCGGTTTAGAGCGAGCTTGAGCGGTTGCGAAGATTTTATGCGGT GGTCCCGGATTTGGTAACCTTTGGTAAGGTATAGGTGCTGGGCTTCTTTGGC	142	KIMELLHSINDFNEAKQVAGGVNSPI AFKSVKGTPTPFILKGGKAYLYDNDNN YIDFVQSWGPLIFGHADDEEIEENIINA KGTSFGAPTELETTLAKEIISCYEGLC VRLVSSGTEATMSAIRLARAYSQKDC KFEGCYHGHSDSLVKAGSGCATFGS PSSLGVPNDFSKHTLVARYNDLNSTEE CFKKGNGVCVIEPIAGNMGLVPAQKE FLLGLKALCEKYQAVLILDEVMSGFRA SLSGSQEFYGVVVDLVTFGKVIGAGLP L
HP0336	143	AACCCCAATTCTACAGAAAGTGTGAATGAAAGAAATTTTGGGGCAATCCTACAAGCATGTTTGATTTGAATAAG ATCAAGTATCAATGGCGGATCATTTGTGAAAACGATGCTCGCTAACACCTGGTTTCTGAAGAAGTGAGCATGAA TGATGACAAAGGATTTTGAATTAAGCGCAGAGAAAGATCGGTTATGACAGAGCTTTAGCGCAACTCATTTT TATGGACAGCTTGCAAGCGAATAATTTAATTGACAAATCAATCCCTTATCACCAGCCCCGAAATCAATTTGTGTTT GGTGCCTCAAGCTTATGAAGAAGCCGTACACAGCCATGCGGTATGCGGTGATGGTAGAAAGCATAAGTGCGAATAC GAAGAGATTTATGACATGTGGCGTAACGATATGCAATTAAGCAAGCAAGCACTATATCGCGCAAGTGATATGGA ATTAGCCAAAACCCACAGAAAGCAAT	144	NPNSTESVNERKIFGNGPTSMFDLNKI KYQWADHLWKTMLANTWFAEEVSMN DDKRDYLLKSAEEKIGYDRALACLIFM DSLQANNLIDNINPFITSPENLCLVRQA YEEALHSHAYAVMVESISANTEEEYDM WRNDMQLKSKNDYIAQVYMEAKNPT EENI
HP0336	145	TTATGCGCCTCATAAGCTTTTAGGGGCGATTGGAGGGTGGCGTCTTTTAGGCAATTTCTAAGATTTGATTGACACGC AGATCGCCCGAGTTTAGCGCAGGGGGCGGTGATTAATACGCTAATCGCACCGCATGAATTTATTGATGAATTG CCTTTGAGGGAGGAGTTTGGCAGCGCAGGATTTGCAATTTACAGAGCGCTTAGCGTATCAATTTAGAGATGA ATGCGGTTTGGACTTTATCCATAAGAAAGAAACACCTTTAAGAGTGTCTAATGCTAATGCTTAAAGACTTGCCCGC TATTAATATTATGGGAATTAACAGCGCATCGGGTGGGTAGTGGCTTTAATATTGGGGGATTTGCGCCCTATG ATTTAGCGAGGGTTTAAAGCTATGAATACGCTATTGAACCCGGGCGAGGTGCTCTTGGCGCAGGGCCTTATGGGCAT GATTTATTGAATCTTAACGCTCAAAAGTCAAGCGATTTTAACGC	146	YAPHKLLGGGGCGLLGISKDLIDTQIA PSFSAGGVJKYANRTRHEFIDELPLREE FGTPGLLQFYRSALAYQLRDECGLDFI HKKENNLLRVLMHGLKDLPAINYGNLT AHRVGWVAFNIGGISPYDLARVLSY AIETRAGCSCAGPYGHDLLNLNAQKSS DFN

HP0336	147	GAAATAAAGGCGCAGAGAAATTTTAAAAACCTTACAAACAGACAAAGAAATTTGAGAGTGCTTATCAAAAT AACCTTAAGAAATTTAGACGCTACAGGATTTGCCAACGCTCTTAAACATTACGAAATTTGTGAGAAAGATTCTTAGG GTGATGGCTTACGCTCAATTGCTTTTGTCTAAGAACACCAAGAGCGAAGTTTATTCGCAATCGCAATGCGCTTGC GCGAATATCCAACACACCTTTTATCTTTGAATTCAGAACTTAGACGCCAAACACAGCTCGCTTTCATTA AAAAATGCAAGACCATGCTTTTATTTGAACATCTCATAGAAAGGAAAGACACACCTAAATTTAGATGAAGAAA GATCGCTCTAGCCCTTTCACCTGTGGAGTGGTGCTTTAGCCCTCTTGACAAACCCCAACGCAAGATCCGTAAAA CCCTTTGAAGAGCAAAATTTAAGCGAGGAGAAATTTTAGCCCTCTTGACAAACCCCAACGCAAGATCCGTAAAA ATCTCAAAAGCTTTTCAGTAAAGCGTTAGAAAAATCCGCCCTTTGCTCACTTACATTTAACATGGTGGTAAAGA TTTGCTCATTGAACTAGGCTGAGAAATACGATAAAAGAGAGTTTCCGCCACATTGACAAACGAGATCTCCCAAGA GAGCGTGATAGCATGATAGATCGTGAACGCTAATTTTCTTTAGTCATCGTTATTATCATCAAAAAGCGCAAT TTTAGGGCATAAACTCAAGATTATGACCGCTACGCCCTTTAACGATGAGAGCATCACCATGACTTACTCTCAAGC TTTAGAAGAAGTGCTTAAACCCCTTAAAGCCTTTAGCCCTGAATTTACAAAATCGCTTCTAAAGCGATCAAGAGGG CTGGGTGATTACACCCCTAAAGACTTTAAGCAAGGTGGGCTTTTAGCCATGGCGGGTGCTTAGCGCTACCCCT TATGTGCTGT	148	ENKESAEFLKLTQTEAQEFESAYQI LKNLDATGFANALKH-YENLSEKISRVI AYAQLLFAKNTKEAKFYSQCEMACAI QOHLFFEIEFKNLD/AKKQLAFIKCK HAFYLNLIERKKHTLNLDEEKIALAL PVGGAFSRLFDEHF:SSLKIPFEEQN SEEEIALLHNPKRKIRKKSQKAFSKAL EKSRPLTYILNMVRKDLLIETRLRYD KKEFRHIDNQISQESVDSMIEIVNANF SLVHRYHHQAKILGHKLKDYDRYAPL NDESITMTYQAALKEE/LKTLKAFSPEFH KIAKAIKEGWVDSHPKDFKQGGAFSH GGVPSAHPYVLLNYTGNRRDAFTIAHE FGHMIHQELSKKQGV/LNMDTPLTTAET ASVFSEMLFFEHLKK3LKSDELLFMLA GKLEDIFSTLFRQVVMTNFERRIHEMD EELDTKDFDRWFEENQRMFEKSVKLT KNYHLWWSYIPHFHISPFYCYAYSYGQ LLTLALYGLYKKSDAKEFVKTYTEFLSL GGSKSPKELVSMFGF:DIDSKEFWEIGM QEVRLLEEFERLLACKEN
HP0336	149	TTGAGAGAGCAAAAAGCCAGGAAAGAAACCCACGCTATGACAATCGTGATTTTAAAGGCACGCCCTCC TAAAGGCATAGAGCCTGTGTAAGGATTAAAGTCCCAAAATGAGGTGATTTTAAAGCGGGTTAAAGGCGG AAGTGAAAGTGAATACGAATTAAGCATTTTATTCGCCAGGAGCGATGGACACCCACCTTAACTTTGTGG TTACTATTGATGACGCTTAAATGGGATTACTGATGATTAGAGCGGATGATCACCTTTCTAACACCCCTAAACAAA TCGTTCTTTAAGGCTTTGAATTTTAAATCCCTAATTTTCCATGTCGCGATGATTTGAATGAAGAGGCAAAA ATTAGCAAAACGCCATGGGCCACTAATGTGATGGACTATCAAGAAATGGGCTATCTTAAAGAGCTTTAGTGAATTT TTAGCGCGTTTGGGTGGAGCTATCAGGATAAAGAGGTTTTAGCATGCAAGAAATGCTAGAAATTTTGTATCCTAA AGATTTGAATCTTCCGCCAGTTGCTTCAGCTGGCACAAGCTTAATTGGCTCAAGC	150	LREEQKARKEPTRYDNRYRDFKGTTP KGIEPVVRIKVPQNEVIGFNDGVKGEV KVNTNELDDFIARSDGTPTYNFWTID DALMGITDVRGDDHLSNTPKQIVLYKA LNFKIPNFFHVPMILNEEGQKLSKRHG ATNVMQDYQEMGYLKEALVNFLARLGW SYQDKFVFSMQELLELFDPKDLNSSPS CFSWHKLNWLN
HP0336	151	GAAAAACAAAAATTAACCCCAACAGAAATCCAAACATGCAATCGCGCTCCAAAAAATAACGAAATAATCAAG CTCAAAATGAACCCAGCAAAACGCTCTCTTAGAAGCGTTAAATAATAGCTTTGAACCGAGCGTTACTCTAAAAACACAA ATGGAATGCTTTCTCAAGCTTAGGAAGTTCTTCTGACAACGCTCAATACATCGCTTACAAATACGATTGGTATCAAG GCGTTTGAAGAAACCTTAAAGGTTTGAACATGTTGAAAGTGCGCTATGCAAAAGCGACCCCTTATTGATTATAAT TCCCTAACGGTCAGGCTTTGTTTCAAGTGCCATCTATGCGCTGCTCTTAGTTTTTCAAGCATGGGTGCACCA TTTGGAATCATTGAACATTCACCTAGCGCCCAAAATGCCCTATCTTGATGGCTAAAAATTTTCAGCATGCCCTT ATGGAACAGGTTATTGAGAAATACAGAAATGATTGTAGCCCTTATTCAAAATAAACTGAGTGATGCAATTTCAAAATA TCGCTTATTGAAATGGGATCAATGGAGAAATCAAAACCTTAAAGGATCAGTAGATTGAACGCGCTCATAGAAGTTG CTATCTTAACGAGAGAAATCAATTAACATATATAGAGAACTTTGAAAGAAAGCGGACCTTTGGGAAGAACAACTGA AATTAGAAAGAGAAACGACAGCAAGAAACATTGCTAGCTCTAAAGTTATTGTCAAATGAAACACTCGTGAAAAATAC CATATCTCTTTTGTCTGTCTGTTTGTGGCAGAGATATAACAGCGGTTAAAGCAACTGGATAGCACCTAC CAAGAGACCAACCAAGTGCTCAAAACCTTAGATGAGATTTTCAACCACTAGCCCTAGTGTAAATGAATGAAATG GGTGAAGAAGATGCTCTAAACATCAAAAAAGCGGCCATTGCTTTGAGAGGAGATTAGCGTTATTGAAAGCCCAATTT GAAGCGAA	152	EKQKINTQTEIQNMQIALQKNNEIKLK MNQNALLEALKNSFE:PSVTLKTQME MLSQALGSSSDNAQYIAYNTIGIKAFEE TLKGFETWLKVAMQKATLIDYNSLTGO ALFQSAIYAPALSFFSSMGAPFGIETFT LAPTKCPYLDGLKISACLMQEQVIONYR MIVALIQNKLSADAFQNIAYLNGINGEIK TLKGSVDLNLALIEVAILNAENHNLNYIEN EKKADLWEEQLKLERETTARNIASSK VK

PCT/EP01/15428

HP0336	153	TATTTTAGCGTGTGGCTTTCGAAGAGGGCTGGGATAATCCAAACATTTTACCCTTATTAACTGGCAATCTCTAC CAGCGAAACCGCGCCCATCAGCAAGTGGGCGGGTTAAGAAATGCGATTATCAAGAGGCGCAAGCGCGTTTAC GCATGGATTTTAAAGGCAATGACAACGCTTTTATAAATAAATACCTGATGATGTTAGTGGCGGAAGAAGT GGGCTTTATAGAGGGTTTGCAAAAGAGATTGAAGCGAGCAGCTTATTGGTGGCAACGCGCTAGACAGAGAG GATTTAGCCAAAGTTAGGCTTAAATGAAGAGAGATAAATAAATCTTTCGTTGAATTAGAAAATTCAAACGCCCTAGAA TTTGACGAAACCAACACGCTTACAAAATGATTGCCCTATTGTGAGACGATGCAAAACAATGAAGAAAGGATAAAA GACTTTTAAGCGATGAAGAAATACCAAGCGCGTTTTA	154	IFSVWALQEGWDNPNIFTLIKLANST TSRHQQVGRGLRIAINQEGKRVTHG KGNDFAFYKINYLDMLVSGEEVGFI LQKEIEASSFIGGNGALDREDLAKLGI EREINKLFVELENSNALEFDETNAYI APICETMQNNEERIKDFLSDEEYHAYL
HP0336	155	TGACTCATGGCTTTTGGATCCAAAACCCGCTTATGCCACAGGGCGTTTGGGAATTTCTACCCGGTCAGCAAA ATACGGCTGGGTTACTGCGACTTTGAATATTTTGGATGATATAGGCTTAGCTTGCAAAACAATCCATCATGCTAG GCCAATTAGCGAATGAAAAGAAATTTAGCGTATAAAGCTAGAGCAAGAAAGACGAAACAGCTTTACAGAAAATCG CTTGATATTGCCAGAGCCAAAGATTGAATCTTCAAGGCTAGTTGGATCGGCCAATCTTCTTTGCCAATATTAAAG AGGAAATACGACGCTAATTTAGTGGATTTCACCACTATTAAAGGGGCTTAACCAACGCGCTTGTATGCGGAAGTGGC TTACAATTTAGCGCTCAATAATTATGAAGTGCAAAAAGCCCAATTACATTTCAACAGCGGGCATAAATAGACGACTAT GTGCATTAAAGGGAATGAAAATGATACGAAAATTTAATAGGACTTTTGTAGTTTGTAGCATGGAAGCTGGCGA AAAAGTGATGCGATTTCAATGTGAAGCGCACACAAGATTCCAAACCTCACCTAGACAGCACAGGAATTTGTGGATA GCATTAAGGTTACTGAGGGGAGCGTGTGCAAAAAGGGCGATGTTTGTGCTTTATATAATCAAGACAAAACAGGCT CAAAGCGATTCCACCGAACAACTCATTTTCGCTAAAAGCAATACCAACGATACAGCAAAATTTGGGGCGCTGT	156	DSWLFWIQKPAYATGRFNGFYPGQQN TAGVTATLNIFFDDIGLSLQKQSIMLGQL ANEKNLAYKKLEQEKDEQLYRKSLDIA RAKIESSKASLDAANLSFANIKRKYDAN LVDFTTYLRGLTTRFDAEVAAYNLALNN YEVQKANYIFNSGHKIDDYVH
HP0336	157	TTGATTGAAAATTCAGCGCGCTAGAAAGGGAAATTGAAACAAAAGAAATGAACATTTAGAGAACGCTTTAAAAGAGCAA GAATATTTGAAAACCGCATGGCTTTAGAAATGGAATAACAAAAGAAATCTTTACAAATAAAAATTTGGAATTTGAAA AATCTTACCAACAGCCCTAAATATCTTAAAGGCGAAGTCGCTTCAAAAAGATACTAGCTCCATGCATAAAGAAATCC ATAAGCGAGCGAAATTTAAGCAACACAAA	158	LIENSSALERELKQKNEHLENALKEQE YLKNAWILLEMEKQKEIFHNKKLELEKS YQQALNILKSEVASKDTSSMHKEIHK SEILSKHK
HP0336	159	AAAGGCTTTAGAAGAAATCGTTGAAAATAGCGATGGGAGTCTCTTTATCGCTTGGTGATCTTGTATGAAGATAA GCCTTGCAGAGCGTGGAGAGCGGTATATGAACCTTTAGCGCTCTCTTTAGGTAAAGCCCTTTGAGGAGTTTGA ATTTAGAGGTTATTTAACCACTTTCTAATCGCGCTGGAGCGGTAAAGCCCTATGAATTAAGATGGCTTAGAA TGAACGAAGTGGCTTTAAAAATGCGAGACCAATTCCTAGCATTTTATAGATAAATCCCACTATTTGATGC AATTAATCCCTGAGTTTGATAAATATCCGCTTATGGATAGCTCAAAAACGCGCTTTGGGCGTATTTAGGAGCTGGAG GTTATACCCAAATGCTGGGCTAGTTATGTGAATTTAACGCGAGGCTATGGGAGTGTGCATGAATGAGGGCGG TATTTCTTCATCGGTGGTGGTGGAGCAGGCACTGATATTGGTGGGGAGC	160	KALEENRLKNSDGESLYRLVLYEDKP CESVESAYMKLLALSGLKAPLRSLNLE GIFNQLSNAAWSGNKPYELEWLRMNE VALKMRDHFPIDFKFPRLMQLPE FDNIRLLDSSKTRFGAYLGTGGYTQMP GASYVNFNAGAMGVCMNEGRISVV VGAGTDIGGG
HP0336	161	ATCGCATGATGAAAATCTTTTGGCAAGAAATTTGATGCAACTAAACGGCTAGAAAATGTGATCGATCTTTATGGGA TATGAATATCCCTGCTTTTATTTTAGAAAACATGCCCTTTTGCAAGACATCGCGCATCTCAAGGGCTGCTTTTGGGA TAACAAACCTTGCCCAAGTTTGTGAATTAGAGGTTTACGCGCTCTATTAAATAGCCCTATAAAAGCGCGTCTGACTTTT GAATACCGCTGCAAGCATTG	162	SHDENLFWQEIATKRLNVIDLLWDM NIPAFILEKHALLQDIARSQGLLDNKP CQVFELEVLRAALLNSPIKARLTFEYRCK H
HP0336	163	TAACCATGACAACCTCAAAAACCCCATGCCCTTATCGCTTATACGCATTTGCCCTTTGACGAGTGGCTGTTATTT TTGCGCTTGTTCAGTCATTTACACCGCTTAGAAGAGAAAATCCGCTATATCAGCTACCTTAAAAAAGAACTCGC TCTTTTAAAACCGCGATGGATACCAACAGAGAGTGGCGCAATTCACCTATGAGGGCGGACCGCCGACCTTTTTT CGCCCATTCATTAATGATGAATACCAAGCAATTCAGGAAGTTTCCCTAATTTAGCAAGATATTGAAATGAGTT GTGAGATTGACCCCTAGGCAATTTCACTAAAGAAACACATGCAAAACCTTGTGATAGGGGGTTAACCGCTTGAGTTTTG GGTGCAGGATTTGATTTGAGGTTCAAAAAGCCATTG	164	NHDNLKNPMPLSLYTHLPFCRSACYFC ACSVIYTSLEKKIRYISYLKELALLKN AMDTNREVAQFHYGGGTPTFFSPIQL DEITQSIQEVFPNFSKDIEMSCIEDPRH FTKEHMQLTDFRGNRLSFGVQDFDF EVQKAI

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HP0336	165	GAAGAAAGGGCGCATCTTAAGGGCTTAAGGAAATTTGATCTAGAGTTTTAAATAGCCAGATCAAGCCTGAA AGGGATTTCCAAATCAATTAATAGGATTAACCTTGATGCTGCTATTTGTTAAAGACGCTAACAAACACCCCTA TTGAATGGCCCAACACATGTTTATAGCATTCGATGTTTATAGCACAACCAAGAACCCCAATAAATCGCCT TAGAATTTTATGAAGTTTGAAGCAAGTTTGAAGCGATGTGCGCACCCCACTCTAGCGAACGCCGCCACCAAA CACAGCTCAGCTCATGCTATATTGGCAGCACCGCGGATAATATTGAGGGATTTTACAGCTATAAGGAAATGGC GCTGTTGCCAAATACGGGAGGGATTTGGCTGGGATTTTCTTTGGTGGCTCTATTGGGAGTTATATTGATGGC ATAAATCGAGCGCTGCGACGATCCCTTTTAAATCGCTAACGATGTGCGGATTCGGTGGATCAATTAGGC ACACGAAAGGGCGGATTCGGGTGATTGGGAAATTTGGCACATTGATGATGGATTCATTGATTAAAGGAA TAGCGCGGATGAAGGCGAAGCGCATGATTATCCCGCTCTTGGGTGCGGATTTGTTTGAAGAGGTTT TAGAAGATGCGATGTGGACTTTATTTGACCTTATGAGTGAGGATTTGACTGAGCTTATGGCAGGATTTTGAA AACGCTATTTAGAGTATGAAGATCCCAAGATCAATTAAGGAATACATTAAAGCTAAAGATTTATGGAAATAATCTT AATGAATTTTGAAGCGGTTTGCCTTTCTAGCCTTTAAAGATAACGCCAATCGGTGCAACCCCAACGCTCATGC AGGAATCATTCGATCCAGCAATCTATGACGGAGATTTTCCAAATACCGCGCTAACCACTACTACATGCAAAATAGA ATACACGACGGCA	166	EEKGRILKGFEKFCLEFLNSQIKPEI FQFNLYGIKTYDRYLLKDAANNPIE QHMFMSIAMFLAQNEQEPNKIALEF VLSKFEAMCATPTLANARTTKHQLS YIGSTPDNIEGIFDSYKEMALLSKYG IGWDFSLVRSIGSYIDGHKNASAGTIF LKIANDVAIAVDQLGTRKGAIAVYLEIW HIDVMEFIDLRKNSGDERRRAHDLFPA LWVCDLFLKRVLED/AMWTLFDPYECK DLTELYGQDFEKRYI.EYEKDPKIIKEYI NAKDLWKKILMNYFE:AGLPFLAFKDNA NRCNPNAHAGIIRSSNLCTEIFQNTAPN HYMQIEYTDGTIEFFEEKELVTDSNI TKCANKLTST
HP0336	167	GCGACTCATTAAACAAGCCAGCCAGAGCGGCTAAACCGCCTTAATGGAGCGTTTCACTTTGAGCGAGATTC AAAGCAAGGCCATTTAGAAATGCGTTTGCAACGCTTAACAGGCCCTTGAAGGGATAAGATCAAGAAGAATACCAA AACTTGTTGGAGCTTATTGATGATCTCAATGGCATTAAAGAGCGAAGATCGTTGAATGGAGTCGTCAAAACAGAG CTTTTAGAAGTCAAGAGCAATTTCTCTCAAGGGCGCACTGAAATCAAGAACTCTTATGAAATATTGACATAGAAG ATTTGATCGCTAATGAGCCTATGGTAGTGAAGCATGAGTTATAAGGCTATGTAAGAGAGTGATTTAAAGCTTATG AAAAGCAAAATCGTGTGTAAGGCAAGCTTTGAGGCACTTATGAGGCACTTATGAAAGCTATAAAATCCAGAAAGC CTAACACGCGATGATATTTGCTCTTATCACCAATAAGGGCAATTTGATCATTTGAAAGCTATAAAATCCAGAAAGC GAGCCGATCGCTATGGTAAAGCCATTGTAATTTAATCTCGCTCGCTCGGATGAAAGATCATGCGGACTCTAA GCACCAAGAGCTTTAGCGATGAACGCTCTTTGGCCTCTTACGAAATGGGTGGAAGCGCACCAATTTGAGC GAATTTGAAAGCAACAGGAGTTGTGGTATCAGAGCGATTGTTTAGATGAAGCGGATGAATTAGTGAGCGCAAAAGT TGTTGATAAAACGCTAAGCATTTGCTCATCGCATCGCATTTGGGCTTTTCAATTAATCCCTTTAGAGAGAGTGCG CGAGATCGGAAGCACTACTCGTGGGTTATAGGCATCAAGCTGAATGAAACCGATTTGTTGCGGTGCGGTCGTTA TAGCGATGATGGCAACAAGCTTTTGAAGCGTGAGTGAAACGGGCTTGCGCAAGCAAACTTTAGCCGAAAGCGGTATAG AGGCAATCTCGTGGA	168	RLIKTSQSPAANKNALMERFTLSEIQSK AILEMRLQRLTGLERDKIKEEYQNLIELI DDLNGILKSEDRNGVWKTLELVKEQ FSSPRRTIEQESYENIDIEDLIANEPNV VMSYKGYVKRVDLIKAYEKQNRGK GKLSGSTYEDDFIENFFVANTHDILLFIT NKGQLYHLKVYKIPEASRIAMGKAIVNL ISLAPDEKIMATLSTKDFSDERSLAFFT KNGVWKRTNLSEFES.NRSCGIRAVLD EGDELVSAAVVDKNA/KHLLIASHLGIFI KFPLEEVREIGRTTRGVIGIKLNENDFV VGAVISDDGNKLLSVSENGLGKQTLA EAYRGQSRGGKGVIGMKLTQKTGNLV GVISVDDENLDLMILTASAKMIRV
HP0336	169	TGCGATACCTTGCATCCAATGCCAGAGCGCTTAAACAACCAACCATAGATATTATAGAAATGGATGGGCGGTCTAA TAGGGGATTGATGATGTCGGTAATCTCATAGAGCAACCGCGCTACAAACCAAGCTTTGGCGCTATAAATCTTTA TCATTGATGAAGTGATATGTTACCAACCGAGGCTTAAACGGCTTTAAAGACTTTAGAGAGCCTCCTAGCCATG TGAATTCCTTTTAGCGACAACAGACGCTTGAACCTGCCCGCTACCATCTAGCGGCAACCAAGTATGAAACAAAGCG AAAAAATCCCTGAAATTCGGTATTCTCATTTAAACCATTTTAGAAAAGAACAAAGTATGAAACAAAGCG CGTTAGAAAACCTGGCTCACAGCGGGCAAGGAGCCTAAGGGATACGATCAGCTCTTTTAGAACAAAGCCATCAATTAT TGCGATAACGCTATCACAGAAAGCAAGGTGGCTGAAATGTTAGGAGCGATTGACAGAAAGCGTTTATAGAAAGATTTT CCAAAGCCTAATCAACCAAGATGAAGCGCGATTAAAGAGCGTTATGCCATTTTAGAAAATTTATGAAA	170	CDTICQCSALNNHHIIDIEMDGASNR GIDVNRNLIEQTRYKPSFGRYKIFIDEV HMFTEAFNALLKTL:EPESHVKFLAT TDALKLPATILSRTHFRFKIPENSVIS HLKTIKEQVSYETSALAKLAHSGQG SLRDTITLLEQAINYCDNAITESKVAEM LGAIDRSVLEDFQSI.INQDEARLKERY AILENYE

HP0336	171	AAACAGCGCGCTGTTGTAAAGATCTCAAGCCAAAGCGCTAGACGGATGCTCAATTACATGGCTTACTATAAAGA TGAAATTAAGCATGATTTTAGAGCAATTAGAAGAAATTAGAAGCCCAAAAGCGCTTAATCAGCGCTTATGA AAAGAAAGCCAAAGAGAGGCAAGAAATCGTATGCCATTTAGCGGAAGCGACAGCCGTTTTCGGGTAATT ATCGCGCAGAGAAATTAACAACTCGTATTGCTTTGCCCTGCTCAGATTATCGGTGCTGATAGGCAAGACGGG AAAAATATTGAAGCGTTTAAAGGTCAGCGGGTGGATATAGAAATTTAGCGAAGATAGCAGCAATTGTGTTTGT CAGTTTCAATCTTTATCGCGGTGAAGTAGCGAGCGGAGACGCTTAAATTTAATAGAACGCGCGTATCCAGCCTA ACAGGATTGAAGAGGTTTATCATAGAGTCGCGGCAACCTGGAAAGAAATGCTTTCTGAAGGGGAGAGCGGTGT GTTAGAAATTAGAGCTTGGAGCTATGGAAGATGAGCTTAAATTTAATAGGCAAAATCGCTTATCGCTCCAGTTTGG GCAAAAGCGCTTACAGCATCTCTAAAGAAAGTCGCTCTTTAGCCGGCTTGATGCAGAGCAGCTTGGGGGGATAAAA AA	172	KQRAVCKESQAKALDAMLNYMAYTI EIKSMILEQLEEELEAQKSAIRRYEK2 AKEEGKKSYAILAEATARFAGNYA9 NLTTTRIALPCSDYIGRVIGDKGNIEA5 KVSVDIEFSEDSSELCLSSFNLYYR2 VASETLKILIEDGRIQPNRIEEVYHRV4 NLEKELLSEGESVLELELGAMEDELKI LIGKMRYRSSFGQNALQHSKEVALLAG LIAEQLGGDKK
HP0336	173	TGGTTGGATGCTTAGGGCGCAAAAGGCATGATAGAAATTGTGCGGAAAGTTTCAGTCGTAGAAATGCTAGAAAGGA CGATTTCACTAAACGCTATAAGAAATCGCCCCATTAGCATCGTGGAATTTTATACCTTTGTTGCAGGGCTATGA TTCAGTGGCGATGGATCGGACATTGAGCTTGGGGCAATGATCAAAAGTTTAAATTTGCTGGTGGCGCTTTTTCG AACGAGCTTATGGCTTGAATAAGAGCAGTCTGTACACCATGCCCTTATTAGAGGGCTTGTATGGGTGCAAAAA ATGAGTAAAGCTTGGGAATTATGTGGGATCACTGAAGAGCCTAATCGCATGTTTGGGAAGATCATGAGCGTGA GCGATGATCTCATGTGGCGCTATTACACCTTTTGAGCACTAAGACTTTAGAGAAATGAAGACTTAAACATGGA TTTTAAACCAACCTTGACCCCTAAAGCCGTTAAAGAGGATCTCGCTAGTGAATCGTGGCTGTTATTATGACAATG ATCAAGCCATCAAGGCTAAAGAGCAATTTTCTAAAGTGTAGCGCAACCTTTGCTGAAATTTTATCAGAGAGCG ATTTGATGAGGGGTGGGATTTAGATGTTTAAACAGATTGGCTTTGCCCATCCACTTCAACAGCCAGCGGT GATATTCAAGGGGGAGGGTAAAGATTATCA	174	WLDALGAKGMIELCAKFSVARMLERD DFTKRYKENRPIISIVEFLYPLLQGYDSV AMDADIELGNDQKFNLLVGRFLQRA YGLNKEQSVITMPLLEGLDGVQKMSKS LGNVVGITEEPNAMFGKIMSVSDDL WRYTLLSTKTLEEIEDLKHGILNQTLH PKAVKEDLASEIVARYYDNDQAIKAKE QFSKVFSANLLPEILSESDFDEGVGILD VLKQIGFCPSTSQARRDIQGGGVKIN
HP0336	175	GAGGGCATGAGATGGTGCAAAATTTAAATACCATGACAGCGATTGAAAAACGACCTAAGGAATTTACGAACCTC GCTAAGAACGATTTGTATCGTGAAGATATTGTCGTTTTGCGCTCATGGGACACTTACACTTACCGGTGGTGC GATCGCTTAGATTTGCTTACATGGTGATAGCGATTGGCGGATAAGCCAGCGCTTATATCAATAGTAAAA AGCCTTACTCAATCAGGAATTAAGAAAGTGGGATGTGTTAAATCATTAAGGCGGATAAAATAACCTCGTTTCAT TTGGATGGATCAGCTTAAACTTCTAAGGCTAAAAACCATTTGCGCATCCAAAGAAACCGCTTGAAGAGGTTG ACACTAAGAGCATGATCAATATCTTAGCGACTTTTGGCGCTCTGTTTGAAGACATGGATTAAAGGATTATAA AACTTTGAAGAAAGATTAAACAGATTGCGGGTGGAGACCACTTAAAGAGCGATGAAAGTTTGAAGAAATTTAG CCAACTCACTGAAGAAATTGAATAAGTGTTTCTTAAAGAAAGATGCGATTAGAAATACCAAGAGATGAGTTT ATGGACTCGAGTTTAAAGTATTGGGCTTTAAACCAATGTCTTGAATTTTAGCCCCCAATCGGAGTGGCAGTG TAAGGAATTAGAACATTTAGCGTTTGTCAAGCAACGCTTAGAAATCAACAGGTTGTTGAATGATTGTTGTTAC CCTAAATATGGCGATGAATCATTGCGATTGTAACGGATTAAAGATCCAAAGCGATTGCGCACCATAAATTTTGC AAAAAGCGATGGCGAAGTAGATGCTAAAGTGCCTATGTT	176	EGMRWLQNFKYHDSDLKNDPKFEYEL AKNDLYREDIVFSPHGDTYTLPVGAIA LDFAYMVHSDLGDKATDAYNSKKALL NQELRSGDVVKIIGDKIPRFIWMQDL KTSKAKNHLRIQRNRRLKEVDTKSMINI LATFFGRSVFEDMDLKDYNFEERLTD CGVETTLTEAMKSFENLAKLTEEENKV FSLKEDALEYQEMSLWTRGLRYLGFK TNVNLFLAPNRQWQCKELEHFSVCSS NALEIKQVLLNDCCYPKYGDEIIAIVTDL KDPKAIHHKFKCKAMAIEVDKVPV
HP0336	177	CACGGTGGAGAAAAGGGTAAATCAATGTCTTTAACGGGCGTATTTAGAAATTGAAGGCTTGCCTGATATTAAAT GGAGCAGGCTTTTGAACCTAAGCGATCGAGTGCAGGAGAGTGCAGCGCTTGCCTGGTGGCTTGAATAAAGAG CCGATGATTGAATCTTGAATCCAAATCAAGCTGATTGATGAGATGATTGCAAGCGGTTATGAAGATAAAGAGACT TTGAAAAACCGCGAGATCGGATGCAAGCTTGGTGATAATCCGGTATTGTTAGAGCCAGATAGTAAACGCTCAATA CGCCGCTGTCTATTGAAATTTGATGTGGCAGAAATCACGGAGCCTATTTGGCATGCCCTAATGACCTGATGATGCG CTACTTTGAGCGAAGTTTAGCGGATACGACCGGCAAAAGACCCAGCTATTGATGAAGTGTATTGGCTCTTGC ATGACGAATATTGGGCAATTTAGAGCCTTTGGCGAAATCGTTAAACGCTCCTCCAGTCAAGCACGCTTTGGGT AGTGCCACCCAGTAAATGGACGAACAGAGCTTATTATGAGGGCTATTATCGGATTTTGGGCTGCGGGGCA AGGACTGAAGTCCAGGCTGAGCTTGTGATGGGCAATCAAGCGAGGTTAGGATAATGCGGTGCTCTTTTCCA CTTCCACACGCAATTTGATAATCGCATGGTAGAGGGCTAAAGTGTATTAGGCGAGTGGGAGCTTGGGGCGGC GTGGCTTTACTAGGGCGAATCCCACTAAAGAAATACATGAATTTAGTGAAGTGAAGAGCTAGAGAGCCAAAAG ACAGATCTATCGTACATGAACCTTAACTTAATGGAGAAATTCAGGCTAGTTTGTTCCTTCCATTAAAGGGCGAT CCCTTTTATTAAATATGCTGAGCGTTGAGAGAAATAAAAAAGGAGAGTGGCGGTGAAAAAATCGTTGTGAGTTG GTGTGTGGCGTTGGCTTTTAA	178	TVEKKGKINVFNGRILEIEGLPDKMEQ AFELSDASAEERSAAACVRLNKEPMIE YLKSNIKLIDEMIASGYEDKETLKKRRD AMQAWVDNPVLLPDSNAQYAAVIEID VAEITEPILACPNDDPDDVATLSEVLAD TGKRPHADEVFIGSCMTNIGHFRAC EIVKNAPPSQARLWVPPSKMDEQEI NEGYYAIFGAAGARTVPKSLCMGNI QARVRDNAVVFSTSTRNFONRMGRG AKVYLSAELGAACALLGRIPTKEEY NLVSEKLESQKQIYRYMNFNLMEFI L

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HP0336	179	AAACGCCAAGCAGCACACCAAGAAGCTGAAATCATCAAGGACGCCGGCTTAAGGAGCGGTACGATTGCGGACT AACATGGCAGGCGAGCGGCTTGATATTAACTCACCGATGAAATTAAGAGCTTGGGGCTGTATATCATTTGGCAC TGAAAGGCATGAGAGCGCGAGGATTGACAACTAATTAAGGGCGAAGCGCGCGAGGCGATCCGGGAACAA GCCAATTTTATTTAGTTTGAAGACAACTCTGTTACGCTTTTGGAGCGATAGGATTAAGGGGTGATGGAATAAT TAGGGCTTAAAGACGGCGAAGCATTGAATCAAGCTTGTAAAGAGCGGTGAAACCGCGCAAAAAAAGTGA AAACTTGCAATTTGAAAGCGGTAAAGCATTGTTAGATACGATGATGCTAATGAGCAACGAAAGCGGTGTATAA ATTTAGAGATGAATATTAGATGCAATTTGATACGATATTAGCGTAAATCGCTGAAACAGAGAAATACCGCTCAATCA AATCTTTTCTAACTCAAAGCCTTTGACCATCAAACTGTCTGAAGAGGAACCTTATAGGGCTTAAACATCTTAAAA GAAGATTTAACGCTCATGTTTCTATTAGAAGATTAAAGAGCTCTCTCTATTGAAATTTTGTAGCTGAAACACTCA AAAGCGATTATGAAACAAATGAAAGTTTGGATAGCGAACAAGAGCGGATTGAACGCTCGTGTATTGTCAG ATTTAGACAAAGCATGGCAGAGCACCTTTACAGGATGATAATCTCAAAACCGGCAATTAATTAAGAGGCTATAAC CAAAAGACCCCTCTCGTAGAATACAAAAGAGAGTTACACCTTTCTTAGAATTCATTGAAGACATTAAAAACGGAA GCGATCAAAAC	180	NAKQHTKEAEIKDAGLKGAVTIATNM GRGVDIKLTDEIKELGGYIIGTERHE RRIDNQLRGRSGRGDPTGTSQFYL EDNLLRIFGSDRIKGVMEKLGKDGES ESKLVTRAVENTAQAQKVENLHFESRKIG LEYDDVANEQRKSVYKFRDELVDN DISAKIAENREYALNIQIFSKLKAQFDHQN LSEEEELGLKNILKEDFNAHVSLDLKK ASPIENFVAEKLKSDYENKMKVLDSEQ RSRIERIVYLQILDNAWREHLTYMDNLK TGINLRGYNQKDPLVEYKKESYNLFLE FIEDIKTEAIK
HP0336	181	TATGATATTTACTCGCGCCTTTAAAGGATCGCATTTGTTATTGAGCGGTGAAATTAATGACAGCGTGGCGTCTTCT ATCGTGGCCCAACTCTTGTTTGGAGCTGAAGACCCCTGAAAAGACATTTGTTGTATATCAATTTCTCCGGTGG GGTGATAACAAGCGGCTTAGTATTTATGACACCATGAATTTATCCGCCCTGATGTTTCCACGATTTGCATCGGTCA AGCGGCTTCTATGGGGCGTTTACTGAGCTGTGGGCTAAGGCAAGCGCTTTTCGCTACCCCATTCAGGATT ATGATCCACAGCCTTTAGGGGGCTCAAGGGCAAGCGGATATTGAATCATTTCTAATGAGATTCTCAGGCT TAAAGGCTTGATGAATTTCTATTCTAGCTCAAACTCAGGCGAGGTTTGGAGCAATCGCTAAAGACACGGACAGGG ATTTTATATGAGTGCTAAAGAGCTAAAGAG	182	YDIYSRLLKORIVLLSGEINDSVASSIVA QLLFLEAEDPEKDIGLYINSPGGVITSG LSIYDTMNFIRPDVS'TICIGQAASMGAF LLSCGAKGKRFSLPHSRIMIHQPLGGA QGQASDIEISNEILRLKGLMNSILAQNS GQSLEQIAKDTDRDFYMSAKEAKE
HP0336	183	CCTAGCAATACACGAGAGCATTTAGCGGCAAGAGCTTTTAAAGTGAATTAACACGAGATTCAGCGCGG TGAAATGTTAGAAATCAATGACGAATCGCTAAATCGTGCTAGCTAATGAAGAGATCGGACTTTAAAGCTTTTAA AGAAAGGTTGAGGGCAGTTGTTTGAATAATAAGCCAGGCTCTAATGAAGAGTTGAAAGAAAATTGATTGA AAATTTAGATGAAAAGATTGTTTGAATTCCTAAACGATCATAGAGCAAGAAATGGAATTTGTTTCAAGAAACGCT CTTTATTCATGCAAGCTGAGGAAGTCAATCTTACAAAGATCAAGAAAGCCAAAGAAAGCGTGAGAGCTT TAGGAATGATGCGACAAAAGCGTGAAATCACTTTATCATTGACGCTTTAGCGAAGGAAAGAAAATTGGCGTGC ATGACAAATGAAGTCTTTCAAACTTTGATTATGAAGCGGATGATGACAGGGCAAAACCCAGAAAATCTCATTGAGCAAT ACCGCAAAATAACATGTTAGCGGCGGTGAAATGGCGATGATTGAAGATAGGGTGTAGCTTATTGTTGGATAAA AAC	184	PSKYHAEHLAGKEAF'FKVKLHQIQARE MLEINDELAKIVLANEENATLKLKERV EGQLFLENKARLYNEELKEKLIENLEK IVFDLPKTIIEQEMDLI.FRNALYSMQAE EVKSLQESQEKAKEKRESFRNDATKS VKITFIDALAKEEKIGVHDNEVFQTLYY EAMMTGQNPENLIEQYRKNNMMLAAVK MAMIEDRVLAYLLDKV
HP0336	185	GCCGAGCGTGGAAGAAAACACCTTATTGAACAAAAGGCTTTTTCATCCCGCAAGCGCTTTATTGTAATGCGCTA AAAACGCGTGCCATAACGAAGATCTCAATGTAACTTACAAATATTTTAAACGAATAGAAAATCTAGCCTTGGC ACTCCATCAGAAGAAAATGTCAAAGGCTTGTTCGGGATTAGATGTCAATAGCAATAAATTAGGAGCTCTCATCAA AATAGGGTGGAATAATTGACTAAATCTTGAAGCCATAGGGGCGATGCAATTAGCGGATTTTAAAGCGGGAT TGATGTTTTGGCGACGCTTATGAATATTATGCGCATGTATGCGGCAACGCCGCAAGCGGAGGGAATTTT TCACCCCCAAGAGTGAGCGAAGTCTGCTGCTAAATCACCTACAGGCCCAAGAGAGCGTCAATAAGTTTATGAC CCATGCTGTGGAGTGGGAGCTTACTTACAAATTTCTAAAGTGTAGCGGATAAAATGTCTCAAAAGGGTATTTT GGCAAGAAATCAATTTGACCACTTACAACTTTGCCGTATCAACATGTTTTGCATGACATCAATTTCTAAATTC ATATTGGCACGGGACACGCTTTAGACCCCAAAACATGAAGACGATGAGCCTTTTGTATGCGATCGTTTCCAAACCT CCTTATTCCACTAAATGGGTGGCGGATAGCAACCCCATTTTAAATCAACGATGAGCGCTTT	186	AERGRKHLIEQKGFPPSALFCNALKN ACHNEDLNVTLQNIIFNIEKSSSLGTPSE ENVKGLFADLDVNSNKLGSSSHQNRVE KLTKILEAIGQMQLGCDYLSKSIDVFGDA YEYLMAMYASNAGKSGGEFFTPQEV ELLAKITLHGQESVNVKYVDPCCGSGSL LLQFSKVLGDKNVSKGYFGQEINTTY NLCRINMFLHDINYSKFHIAHGDILLDP KHEDDEPFDIVSNPPIYSTKWVGDSCN PILINDERF

HP0336	187	TTATTAGAAATCAATGAGCCTAAAGATGCTTGGAGTTGCCAATGCGGCGGCGTGTGGTGGTAAATGG GGAGCGCGTTAGCGAGTTAGAGAAATCGCTTTGATTTGAACCAACGACCCCTAAATCCTTTCTTTAGAAAAGC TGTTAGAACTTTAGATCAGCAAAAATCAATTTACCAATGGCTTTTACCTCTCCATAAAGGCGCATGCGAGCT ATTTGCAAAAGGCTAAAGCTTTAGGGATATCTCATTTGTGGGTTAAATAGCGAGCTTCCATCAAAAAGCTTAAG GGGATAAACGCCCATAGTAGCGGAAAAGACAGAGGTTCTTTAGCGAGTTGTCTTGGTGGATTATGTCGT GGTGTGGAAGAAGACACGCCCAATCAAAATTAATCAAGCCCTAAAGCCTGATATTTAGTCAAGGAGCGGATTATCT TAATAAAGAGTCAATAGGAGCGAGTTGCTAAAGAAACCCATTTGATGGAGTTGAAGAAGTTATCCACAAGTG CTATCATAGAAAATTAAGAGGACATGCAATGATTGATAATTAATTAAGAAAGAAATTTAGCCCATAGGAAGCGT TAGAAAAGTTAGAGGTTTCAAGAGCGTTAAACAAAGCGTTTCATCTTTGATAGAACTTTAGAAAATCAAG GGAAATCCTTATTTGCGGTAAAGGAGGAGTGCAGCGATGCACAGCATTTTGCCTGTAATGACTGGCGCTA TAACTAGAAAGGAAGGTTTGAAGCGATAAGCCTTAATACCGATATCTAGCCCTCAGCCCATTCGGAACGATT ATGGTTATGAAGAAAGTTTGCAGACAAAGTGAAGCGTTGGGGTAAACGATGTTTGTAGAGGATTCTACA AGCGGTAATCCAAAATGCTCTAAAGCTTATGAAAAGCCAAAGATTAGAGATGAAAACGCTTAGTTAGCGGGG CGTATGGGGGAAATG	188	ILLESMSLKDACEFANAAAAVVVGKM SALASLEEIALILNQTHPKILSLEKLE DQKIIFNGCFDILLHKGHASYLQKA ALGDILVGLNSDASIKRLKGDKRPIV KDRAFLLASLSCVDYVWVFEEDTPIKI QALKPDILVKGADYLNKEVIGSEFAKE HLMFEFEGYSTSAIEKIKRTCND
HP0336	189	CCCTTAGCGAGCGTTGGCTGAAAAATCGCGAAGAAATAGGCGAGTTGAAAATTAATCGCATTTGCACCATAA CGATCAAGAAATTAAGAAAGTTTGTGATTAAGATCATGCGAGCGGACTTTTAATGATTCGTGAGAAATTAACGAA AATGGGATTATCAAGATTTAACCAATGACGCTATAGGCGATCGTGTTCAGAGGGGGGATAAATCCATG CCCAGTTCTAGTCAATGAAAAGTCAATGCAAGAAATGGCAATCTTCTATTTAGCCCCCTTACACAAACCCGGCA ATTTAGCCGTTAGTTGTTTCAAAAAGCGCACCCCATATCCCTCAATCGTGTTTGACACCGCATTCCTATG CCACTATGCCAGTTACGCTTACATGTATGCGTTACCTTATGAATGTATGAAAAGTATCAATCCGGCACTATGGTT TCCATAGGACTTACACCATATATGTGGCCAAAGAGCGGCAAGTTTGAATACCGCTTATGAGGAATTAACGCG ATCAGTTTGCAATTTAGGGAACGGCTCAAGTCAAGCGCCATTAAGAGGTAAGAGCGTGGATCTTCTATGGGCT AACCCTTTAGAAAGCTTATGATGGGCAAGGTTGGGATATTGACCCCACTGTGGTGAATATACTGCGCAAT GCGGAAACAAGAGCTTAGAAGAAAGTGAATAAATGTTAAACCATGAAAGCGGATTGAAAGGCAATTTGTGGGATAAT GAGAAACATAGAACCCAGAAAGAAAGGATGATAAGAAAGCAAGCTCGCTTTGAATGTGCGCTTATCGCATTA AAAAGCACATTGGGCTTACATGGTAGTCTTAAGAAAGTAGATCGCATCTTTACAGGGGGATTAGGTGAAAAC TACTCGGCTTTAGAGAGAGCGGTGAGAGCTTAGAAATTTAGGGATCGCTTATGTAAGCCCAAC TTAAAGAGCTTGACATCAAGCAGCCCAAAACGGCATGGCTAAGCGCTTATGATGAAGCTTATAGCATCGCTAATGT GATTGGTTCCCTATCATTTGCGCCCTAGTTATGTGCTAGCGGCGCAACACATGCAAAATTTTAGAAAACATTGAGGA ATTGCGCCATTATTTGGAAGCGTTACGCTTATAGAGATTAGTCTTAAACCCGCTTCTCATTTGA	190	PLASGLAEKIGEEIGQLKIKSHLHNDQ ELKEKFIKIDHASGLLMIRENLTKMGIK DFNQIDAIGHRVVQGGDKFHAPVLVNE KVMQEIGNLSILAPLHPANLAGIEFVQ KAHPHQIAVFDTAFAHATMPSYAYMY ALPYELYEKYQIRHYGHFRTSHHYVAK EAAKFLNTAYEEFNAISLHLNGSSAA AIQKGSVDTSMLTLPLEGLMGTRCG DIDPTVVEYTAQCANKSLEEVKMLNH ESGLKGICGDNEKHRSQKRKR
HP0336	191	TACTCGGCTTTAGAGAGAGCGGTGAGAGCTTAGAAATTTAGGGATCGCTTATGTAAGCCCAAC TTAAAGAGCTTGACATCAAGCAGCCCAAAACGGCATGGCTAAGCGCTTATGATGAAGCTTATAGCATCGCTAATGT GATTGGTTCCCTATCATTTGCGCCCTAGTTATGTGCTAGCGGCGCAACACATGCAAAATTTTAGAAAACATTGAGGA ATTGCGCCATTATTTGGAAGCGTTACGCTTATAGAGATTAGTCTTAAACCCGCTTCTCATTTGA	192	LKELDIKQPKNGMAKSVDAYSIAIVIG FPIVRPSYVVLGGQHMQILENIEELRHY LESVTHALEISPKNPLLI
HP0336	193	TGAATGCTTGACACTTATTCGCTCATCCATGACGATTGGCATGCGGCTTTAAGGAGAAACCCACC CCACTTTACACGCTAAATACGATGAACCAACAGCCGTTTAAATCGCGATGCGCTCAACACTTACTCTTTGAATTGC TCTCAACCGCTTTATAGAAAGCCATATCATTGTGGAATTAATCAAAATCTTAAGCGCTAATGGGGGATTAAAGGCA TGATCTTAGGGCAGGCTTTGGATTGCTATTTGAAAACACGCCCTTAAATTTAGAACAACTCACCTTCTTACACGAGC ATAAAACCGCTAAATTGATTAGCGCAAGTCTGATTATGGGCTTGTTCGAGCGGTATTAAAGATGAAGAGCTTTTAA AATGGCTTCAGGCTTTGGTTAAAAATGGGCTTTGCTTCAAGTGTAGATGATATTATAGATGTTACGCAAGATG AAGAAGAAAGCGTAAACCACTCATTTAGACAGCGCTAAACACAGCTTTGTGAATTTATTGGGGCTAGAGAGGGCG ATAATTACGCTCAACCTTTAAACACAGAGGTTTAAATGATTAGATGCAATTGAACCCGCTTATCCTTTATTGCAAG AAAATTTAAACGCTATTGAACACTCTATTAAAGGCAAGACATGAAAAGATTTTACTCACCAACGATGATGCTAC CATGCAAAAGGCTATTAAAGCTTTAGAACAAAGCTTTAGAAAGATGGCAGAAATTTATGTGGTGGCCCCCAAGCATGA AAAAGTGCATGTTCCGAAT	194	ECLHTYSLIHDDLPAMDNAALRNHPT LHAKYDETTAVLIGDALNTYSFELLSNA LLESHIIVELIKILSANGGKGMILGQALD CYFENTPLNLEQLTFLHEHKTAKLISAS LIMGLVASGKDEELFKWLQAFGLKMG LCFQVLDIIVDTQDEEESGKTTHLDSA KNSFVNLLGLERANNYAQTLKTEVLNI ILDALKPAYPLLENLNTLTKFKGT

HP0336	195	GCTTAGAAAATAGCGAAACAGCTTACAATGAAATGTTTTAGAAATGCGATAAGCAATTCATCTTAGAGAGTTGGCTC AATGACTTTGATTGACTAAGATTATAACGAGACTATGCACITAGTTTTCTATCAAGATAAGCCAGATGAAGAGA CAATGCAAGGGCTTTACATTTACTTTGGGAGAGCTTAAAAATAAGATTGCCTGAATACAAGTTTGCCCTTGTCGCCAC ACGCTCATCAAGACCATGCCATATCCATGTTTTATCAATAAGACTAATCAGCTCACAGGAAGAGACTGCGTTTTA AGGGCATGAAGATTGTAAAGAAATTTTAAATGAATTAAGAGTGAGTTGCTTATAGTTGAATGACCACTTATTGA GCGAAGAAATACTTGTATGTCAATGAGCCAAACTTAAAGAGCTAGACAATATCAAAACAATAACAAGACTTGGAAA AAGAAAGAAAAGCCTTAGAACAATCAAAATCCCAAGATGAGTGGACTTAAACAAGGCTTTACAAAGCGGAGTAT TTACAAGAACTCAATATAAAACAAGCAAGCCCTAGACATTCAAAATAACCAAGCACCCCTTTAAACAACAAAG ATTTCTGAATTTAAATCGCTCTGTTTAAATCAAAAGACACAAAGCGATGATGAAAAGAACAGCTAGATATTGACAGG ATAGATAAGAGAAAACCGAGTAAGCGAACACTTAAAAACACTAACAAACAGGACTATACGAACCTTAGGCTTTTAT CAAAAGAAATTAGATAAAACAACCAATTCAGCCCTTAAAGAAATTTGCTATTCTCAATGGTTTAGACAGAGACTTTG AAAGAGAGACTAATGGCTATTCTGTTTTAAAGAAAAGAAATGCTTTTAAATAAGCTTGAACACCTAGACAAACGCC TTTTAGATAAAACTCACACTTACTATTAGCCAGCTAAGAAATGAAGTTAAACCAAGCAAAACATCCAATACAACAC TCTAACTA	196	ALENSETAYNEMFLECDKQFILESW DFDLTKOYNEMTHI.VFSIKDKPDEE QGLLHSTWESLKIRLPEYKFALVPH/0 QDHAHICFINKNTNQLTRRRLRFKGI DCKEFFNELRSEFAYRLNDHLLSEE YVNEPKLKELDNIKQQLQDLEKEEK/ EQIKSPQDEWDLNICALQSEYLQELKYK NKAKALDIQNNHSTPLKQKISEFKIALF NHKDTSDDEKEQLDIDRIDKRKPVSEH LKNTNKHELYELLGFYQKELDKKQNHHS AFKNFALNGLDRD=ERETNGYSVLKK KEMLLNKLEHLDKRLDKNSHLLAQL RNEVKTQKNIQYNTLTNPILLAKALELS KDKRPTLKTFTKNAYFSARKYQFMLESF KTKQNDPTYKLNNDITYELVSKQLQDY	198	MEKDHAILGASTQDPNYSLSHAIRSR SFIFELTPLNKSDDLRLCAKALTLLKKQI EPGAKTYLLNNSAGDARALLNLDLSA KIEDPITLKTQSLRPHSLNDGYSDDT HYNLTSAIKSLRGS;DENASIYYLARLIA GGENPEFIARRLVIFASEDIGNANPNAL NLAASCLFAVKQIGY'PEARILSQCVIYL ACSPKSNATYRAINQALDCVQKGSLYP IPKHLLPNAKDLYLFHDYNGYVVKQDYL EKPLDLVSSQGGIGFIEKTLLEWLDKIRN	200	SOALNVEAFENFAEYVKKIFDEKESLS ERYLQHKVKDFLTRREGVYDLSFEPILAL NANASKPHALPSAKDFLKAHSHILLDM GIKERYCSDRTTRTAFFDPKDFVKRE QSFKDKERQKIYDIVKEAQEKAISGIRA GMTGKEADSLARGVISDYGYGQYFTH STGHGIGLDIHELPIYISSRSETILEEGM VFSVEPGIYIPGFFGVRIEDLVIKNSR ELL
HP0336	197	TATGGAAAAGATCACGCTTTAATTTAGGGGCTAGCACGCAAGATCCTAATTACAGCCCTAAGCCATCGCATCCGAT CAAGAAAGTTTTTGAATTAACCCCTAAACAAGAGCGATTAGACAGGCTTTGCGCTAAAGCTTTAAGACTTGCT CAAAAACAATAAGAGCCTGGCGCTAAACCTATCTTTAAACAACAGCGCTGGCGAGCTAGAGCGTTATTAAACC TTTTAGATTTGAGCGCTAAATAGAGATCCTATCACITTTAAACCGCTACAATCCTTACGGCCTCATAGCCTAAATGA TGGATCTTATAGCGATGATACGCTTATAACCTTACTAGCGGTTAATCAATCTTTAAGAGGGAGCGATGAAAACGC TTCCATCTATTATCTGCGCGCTTGATTGCTGGCGGGAACCCGGAATTTATCGCCAGAGGCTGTGATTTTTG CGAGCGAAGATATTGGTAACGCTAACCCGAACGCCCTTAATTTAGCGGCTTCTGTTTGTGCGAGTCAACAAATCG GCTACCTGAAGCGCGCATCATTTTAAAGCCAAATGCGTGATTATCTGGCTTGTGCGCCAAAGTCTAACACGCGCTTAT AGAGCGATCAATCAGGCTTTGGATTGCGTTCAAAAAGGCTCACTACCTATTCTCAACACACCTGCTGCCTAACGC TAAAGATTACCTTTACCGCATGATTATAACGGCTATGTCAACAAGATTATTTGGAAAACCCCTAGATTGGTTCT TCTCAAGGCATAGGATTGAAAACCCCTTTAGAAATGGCTTGATAAGATAAGAAATGATCTTATAAGTTACATTAA ATGCGACAATGGTAATAAAAATCAATATTTTGGATTGAATTAATAATAGTTTTATCTATGTTTCATCGCAT ATTATTGTATAATAATTCTAGTTATAAAAATCATTTTACGGATAAGGAAGATATCAGCATGAAAAGATTAGAAAAC GGAATCC	197	TATGGAAAAGATCACGCTTTAATTTAGGGGCTAGCACGCAAGATCCTAATTACAGCCCTAAGCCATCGCATCCGAT CAAGAAAGTTTTTGAATTAACCCCTAAACAAGAGCGATTAGACAGGCTTTGCGCTAAAGCTTTAAGACTTGCT CAAAAACAATAAGAGCCTGGCGCTAAACCTATCTTTAAACAACAGCGCTGGCGAGCTAGAGCGTTATTAAACC TTTTAGATTTGAGCGCTAAATAGAGATCCTATCACITTTAAACCGCTACAATCCTTACGGCCTCATAGCCTAAATGA TGGATCTTATAGCGATGATACGCTTATAACCTTACTAGCGGTTAATCAATCTTTAAGAGGGAGCGATGAAAACGC TTCCATCTATTATCTGCGCGCTTGATTGCTGGCGGGAACCCGGAATTTATCGCCAGAGGCTGTGATTTTTG CGAGCGAAGATATTGGTAACGCTAACCCGAACGCCCTTAATTTAGCGGCTTCTGTTTGTGCGAGTCAACAAATCG GCTACCTGAAGCGCGCATCATTTTAAAGCCAAATGCGTGATTATCTGGCTTGTGCGCCAAAGTCTAACACGCGCTTAT AGAGCGATCAATCAGGCTTTGGATTGCGTTCAAAAAGGCTCACTACCTATTCTCAACACACCTGCTGCCTAACGC TAAAGATTACCTTTACCGCATGATTATAACGGCTATGTCAACAAGATTATTTGGAAAACCCCTAGATTGGTTCT TCTCAAGGCATAGGATTGAAAACCCCTTTAGAAATGGCTTGATAAGATAAGAAATGATCTTATAAGTTACATTAA ATGCGACAATGGTAATAAAAATCAATATTTTGGATTGAATTAATAATAGTTTTATCTATGTTTCATCGCAT ATTATTGTATAATAATTCTAGTTATAAAAATCATTTTACGGATAAGGAAGATATCAGCATGAAAAGATTAGAAAAC GGAATCC	198	MEKDHAILGASTQDPNYSLSHAIRSR SFIFELTPLNKSDDLRLCAKALTLLKKQI EPGAKTYLLNNSAGDARALLNLDLSA KIEDPITLKTQSLRPHSLNDGYSDDT HYNLTSAIKSLRGS;DENASIYYLARLIA GGENPEFIARRLVIFASEDIGNANPNAL NLAASCLFAVKQIGY'PEARILSQCVIYL ACSPKSNATYRAINQALDCVQKGSLYP IPKHLLPNAKDLYLFHDYNGYVVKQDYL EKPLDLVSSQGGIGFIEKTLLEWLDKIRN	200	SOALNVEAFENFAEYVKKIFDEKESLS ERYLQHKVKDFLTRREGVYDLSFEPILAL NANASKPHALPSAKDFLKAHSHILLDM GIKERYCSDRTTRTAFFDPKDFVKRE QSFKDKERQKIYDIVKEAQEKAISGIRA GMTGKEADSLARGVISDYGYGQYFTH STGHGIGLDIHELPIYISSRSETILEEGM VFSVEPGIYIPGFFGVRIEDLVIKNSR ELL
HP0336	199	TCTCAAGCGCTGAATGTTGAAGCTTTTGAATAATTTGCCGAGTATGTGAAAAGATTTTTGATGAAAAGAGTCGTTG AGCGAGCGGTATTTGCAGCATAAGGTTAAGGACTTTTGACTAGAGAGGGGTTTATGATCTGAGCTTTGAGCCTAT TTTAGCCTTGAATGCGAACCGGAGCAAGCCCATGCTTTGCCCTAGTGCGAAGGATTTTAAAGCGGAGCACAGCA TTCTTTGGATATGGGATCAATACGAACGCTATTGCTCTGATAGGACTCGCACGGCTTTTTTGACCTAAAGATT TTGCTTTTAAAGAGAGCAGAGTTTCAAGGATAAAGAGCGTCAAAAGATTATGACATTGTGAAAGAACGCGCAAGAAA AGGCTATTTAGGCGATTAGCGGGCATGACCGGTAAAGAGCGGACAGCTTGGCTAGGGAGTATTAGCGGATTA TGTTATGGCAATATTTCACTCACAGCACCGGCGCATGGCTTGGCTTAGACATCCATGAGCTTCCCTATATTTTCATC GCGCAGTGAAACCATTTTAGAAGAGGGCATGGTGTCTTCTGTAGAGCGCTGGGATTATATCCCTGGGTTTTTGGGG TGCGCATTTGAAGATTAGTGGTGATCAAAAATCTAGGCTGAGCTTTTGTGATGCGAGAGATCCTTACTAGCCGCTT TTTCCCTAGCCT	199	TCTCAAGCGCTGAATGTTGAAGCTTTTGAATAATTTGCCGAGTATGTGAAAAGATTTTTGATGAAAAGAGTCGTTG AGCGAGCGGTATTTGCAGCATAAGGTTAAGGACTTTTGACTAGAGAGGGGTTTATGATCTGAGCTTTGAGCCTAT TTTAGCCTTGAATGCGAACCGGAGCAAGCCCATGCTTTGCCCTAGTGCGAAGGATTTTAAAGCGGAGCACAGCA TTCTTTGGATATGGGATCAATACGAACGCTATTGCTCTGATAGGACTCGCACGGCTTTTTTGACCTAAAGATT TTGCTTTTAAAGAGAGCAGAGTTTCAAGGATAAAGAGCGTCAAAAGATTATGACATTGTGAAAGAACGCGCAAGAAA AGGCTATTTAGGCGATTAGCGGGCATGACCGGTAAAGAGCGGACAGCTTGGCTAGGGAGTATTAGCGGATTA TGTTATGGCAATATTTCACTCACAGCACCGGCGCATGGCTTGGCTTAGACATCCATGAGCTTCCCTATATTTTCATC GCGCAGTGAAACCATTTTAGAAGAGGGCATGGTGTCTTCTGTAGAGCGCTGGGATTATATCCCTGGGTTTTTGGGG TGCGCATTTGAAGATTAGTGGTGATCAAAAATCTAGGCTGAGCTTTTGTGATGCGAGAGATCCTTACTAGCCGCTT TTTCCCTAGCCT	200	SOALNVEAFENFAEYVKKIFDEKESLS ERYLQHKVKDFLTRREGVYDLSFEPILAL NANASKPHALPSAKDFLKAHSHILLDM GIKERYCSDRTTRTAFFDPKDFVKRE QSFKDKERQKIYDIVKEAQEKAISGIRA GMTGKEADSLARGVISDYGYGQYFTH STGHGIGLDIHELPIYISSRSETILEEGM VFSVEPGIYIPGFFGVRIEDLVIKNSR ELL		

HP0336	201	TATTTTCGTGATGAAAAGGGCTAGATGTGTTGATGTTTATGACAACATCTTAGATACGCTCAAAGCGGTGCGGAA ATGAGCGCGCTATTAGCGCGTATCCCTTACGGGTGGGTATCAGCCACGCTAGCCGGGAAATGGGAACTT CAAGAGCGTATCGCTTCCACTAAAATGGCTCTATCCTCCGTTCAAGCGGTGATGTGCCAGCAGATGACTTGAC TGACCCAGCCCTGCTTCGGTGTTCGGCATTTGGATCGGACTACGGTGTGAATAGAAAGATCGCTGAAAAGGG ATTTATCCGGCGGTGATCCTTTGGATCCACTTCAAGGATTTAAGCCCTCAATGATCGGTGAGAAACACTATGAA GTCGCTACCGGTATCCAGCAGGTTTACAAAATACAGGATTTGCAAGACATTTATGCGATTTGGGATTAGACGAA TTGAGCGAAGAGGATAAAAAACCGTTGAAAGGGCCAGAAAATTGAGAAATTTATCCAGCCGTTCTTTGTGCG TGAAGTGTTCAGGAACTCCTGGTAAATATGTAACCTTCAAGAGACTTTAGAGGGCTTTGGAGGGATTTAGAGG GCAATACGATCATATCCCGAGAACGCGTTTATATGTTGG	202	YFRDEKGLDVLMFIDNIFRYAQSGAE SALLGRIPSAVGYQPTLAGEMGKLE IASTKNGSITSVQAVVYPADDLTDPAF SVFAHLDATTVLNRKIAEKGIYPVDF DSTSRLSPQMIGEKHYEVATGIQQVI QKYKDLQDIAILGLDELSEEDKKTVEI ARKIEKFLSQPFFVAEVFTGSPGKYVTL QETLEGFGILEGKYDHIPENAFYMV
HP0336	203	CATGCGGATGGATGAAAGACAGCTTTTGGATGATTAAGACAGATCGCTCAAAAAGAGGGCTTTTCATTTGTTTG GGAAGAAAGGTGCAACGATTTATCGCACCGAGATTTTGAATAATCTTAGATGAAGATTTGATCATGTTTAGCGTGT GGAGAAATTTGATAAGAAATTTGATTACAAATCCATTGACACCTATTCTAAGCGTATGAAGCATTGAAAATGAAGTG CATGAAAAATCAAGCATTACAAACGCAACTGCCGTAGGAGCGATGAATACGAGTTGGTGTGAAAGCGCTCTA TGAAGAAGAAATTAAGCGCAAGGTTTATAATGGTCTCTCTATTAGAAAACGGGCTTTTTCGAAAGCGCAA AGTTTGGGGCTAGCGGCACGCAAGCGGCGAGCTTTTAACTTCTATGAGCGGTTATCAAGAAGTCATTAG GAACGCTCTAATGATGGCGTTTATCCCTTGGCAAGCCTAGCATTTGATACAGGCATGGGATTAGAAAGGGTGCA AGCGCTATTAGACATAAGCTCAATAATTTGATCTTCATTATTTGCGCCCTAATGAAGAAATCAGCGAGCTTAC AAGCCTAGATTATCGAGCGAGTTCCAGCAAGCTTTAGGGTAGTGCGCATCACGGAAGAGCGGTAGCATTCTTG CTCGCTCAAGGGTGCAATTAAGGAAGCGCTGCTATGTTTAAAGCGCATTTAAGCGAGCTTAAAGCGGCTTAAAGGCA TGGGTATTTAATGGCTTGAAGAAGCGTTTATACAAAGTCGTGGCGTGTGAGCAATTTGCTAACACGC ATCGGTATTTGAAAGAGCTAAAGAAATGGTGTAAAGAAATGTTTGAAGAGAAGAGCATTTTTAGAGACATTTGG AATCGGCGCATGGAATGTTTAACTTGTCTTAAAGCATTTGAATGAAATAAATCTTTGATGGCAAGATCGCTTCAA GCTTATGACACTTTTGGTTCCCTTTGGATTTAACAACGACATGTTAAGAACTCATGGGCGTGTGCGGATATGCA AGGCTTTGAATTTGTCATGCAAGAGCAAGTGAACGCTCTAAGCTTCATGGAAGGCAACAAACACGCGGATT TAGCGCTATTTTAAACGCTTATGCACCTAATGTTTGTGGGTATGAACGACAGAAATGTTCTGCTAAAGTTTTAG GGTTTTGTAGCGATTTTAAAGAAATAACCGATGCAATCCTAACCAAGAGCTGGTGTGTTAGAAAAAACCC CTTTTATGCAGAAAGGTGGAGGGGCTATAGCGGATAGGGCGGCTTTTAAAGACAATGGAGAAGTGGCTATCGT GTTAGATACAAAAAATTTTGGGCTTAATTTTCACTCCTTGAAATCAAAAAGCGCTAAAAAAGGCGATCAAGTG ATCGCGCAAGTGAGCG	204	MRMDERQLFWMIKQIAQKEGFHLFW EERCNDLSHQILNKILDEDLIMFSVSEN LIRNLYKSIDTYSKAYESIEIENEVHEKIKH YKRKLPGVGSDEYELVFERLYEEELRRK GFL
HP0336	205	GAACGCTCTAATGATGGCGTTTATCCCTTGGCAAGCCTAGCATTTGATACAGGCATGGGATTAGAAAGGGTGCA AGCGCTATTAGACATAAGCTCAATAATTTGATCTTCATTATTTGCGCCCTAATGAAGAAATCAGCGAGCTTAC AAGCCTAGATTATCGAGCGAGTTCCAGCAAGCTTTAGGGTAGTGCGCATCACGGAAGAGCGGTAGCATTCTTG CTCGCTCAAGGGTGCAATTAAGGAAGCGCTGCTATGTTTAAAGCGCATTTAAGCGAGCTTAAAGCGGCTTAAAGGCA TGGGTATTTAATGGCTTGAAGAAGCGTTTATACAAAGTCGTGGCGTGTGAGCAATTTGCTAACACGC ATCGGTATTTGAAAGAGCTAAAGAAATGGTGTAAAGAAATGTTTGAAGAGAAGAGCATTTTTAGAGACATTTGG AATCGGCGCATGGAATGTTTAACTTGTCTTAAAGCATTTGAATGAAATAAATCTTTGATGGCAAGATCGCTTCAA GCTTATGACACTTTTGGTTCCCTTTGGATTTAACAACGACATGTTAAGAACTCATGGGCGTGTGCGGATATGCA AGGCTTTGAATTTGTCATGCAAGAGCAAGTGAACGCTCTAAGCTTCATGGAAGGCAACAAACACGCGGATT TAGCGCTATTTTAAACGCTTATGCACCTAATGTTTGTGGGTATGAACGACAGAAATGTTCTGCTAAAGTTTTAG GGTTTTGTAGCGATTTTAAAGAAATAACCGATGCAATCCTAACCAAGAGCTGGTGTGTTAGAAAAAACCC CTTTTATGCAGAAAGGTGGAGGGGCTATAGCGGATAGGGCGGCTTTTAAAGACAATGGAGAAGTGGCTATCGT GTTAGATACAAAAAATTTTGGGCTTAATTTTCACTCCTTGAAATCAAAAAGCGCTAAAAAAGGCGATCAAGTG ATCGCGCAAGTGAGCG	206	ERSNDGVLSPKPSIDTGMGLERVQA LLEHKLNNFSSFLAPLMEEISELTSLD YASEFQPSFRVADHARAVAFLLAQG VHFNKEGRGVLRRLRRALRHGYLM GLKEAFLYKVVGVVCEQFANTHAYLKE SKEMVVKECFEEEEHFLETLESGMELF NLSLHLNENKIFDGKIAFLYDTFGFP LDLTNDMLRSHGACADMQGFELCMQ EQVKRKAASWKGKQNNADFSAILNAY APNVFVGYETTECSAKVLGFFDSDFKE ITDANPNQEVWVLEKTPFYAEGGAI GDRGALFKDNGEVAIVLDTKNFFGLNF SLLEIKKALKKGDQVIAQVSDERFEIAK HHSATHLLQSALREVLGSHVSQAGSLV ESKRLRFDFSHAKALNDEEELKVEDLV NAQIFKHLNSQVEHIMPLNQAKDKGAL ALFSEKYAENVRVVSFKEASIE
HP0336	207	TCTAGGCGAAGAACTCTAAAATTTTAGAGTGCTTAATGATTTTACCATAACCCCTATTGTGGGCGAGCGCTTTCGC TTTTGATGTGAGCTAGCCCTAAGGAGTGTCTAATCTTAAGAAAGCGCAAAACGCCCTCAAGAAGATCGGAAGCGG TGCGAATAGGTGGGATATTACGAATGAAGAGGCGTTTAAATAGAGCGTTAAGAAAGAGCTTGATTTTAAATCT ACAAATCAAGAGCGTATCGTTCCAGCAATTTTAAAGATTTGGCGAAATTAACGCCCGCCAGCGTTGAAGAGATTA AACTTCTCATTTAGTCGTACGATAGGATCTTCTATCAAAACAGAAAACCCCTTTGGTGGCTATGCCATCAATAACG CTCTCAAACTCAATAAGCTTCTTAAATCGCTATGCACCTATTAAAGGATAACCGCTAGCGAAATTTGTGCCGGAAGCT CTTTTGCATCACCCATGAAGTGGGGCTGAAGAAATCCTTTTAGGCATGCTTTTAAATGCTTAACATTGAAGAGCG CGGCCCTAAAAGCTTAGAAGATTCCA	208	LGEESKIFRVLNDFYHNPICGAGRFAF DVSSSPKGSANLKEAQNALKECEAVRI GGDITNEEAFIERLRKELDFKIYNQEA YRFQQLKVLGEIKRPSVEEIKTSHLV TIGSSIKTENPLVRYAINNALKNKASL AMHPIKDNALANLCRSSFCITHEVGAE EILLGMLLKMLNIESAALKSLED

HP0336	209	ATCCAACCCGTGATTATTTCTAGCATAGCGAATCAGCCCTAGACTTGCTCAAGTTATTGAAAAAACCCAGATGAA TGCAAGCGCGATTGAGATCGCTCACTTGCTCTCAATCAAGATGATGATCTGAAGCTAAAGAGCAAGCGCTTTATG ATTTAGGAGCGTTGTATGCAAGGATCAAGGACTTTAAACCGCCACCTTTACAATCTGCAATATTTCAGGACCATG CGGAACCTGGATAAGCTTCTGCTGTTAGGCGCGGATGAAAAAGCCCTTTTCCATGGAGGGGACACGCAAGA AAAAATCGCCCACTATGACAAATCATTCAAATTTCCCTAATCTAATGAAGCCCTAAAGGCTTTAGAAATTGAAAGCC CAACTATTGTTTGAACAACAGCGTTATGCTGAAGTGTAAAGCATGCAAAAAAATTTGCCTAAGATTCCCTTTGATCC AAAAACGCTCAATGCTCTGCTAAACCCCATAGAGAACCATCGTTGTGAAGAACCTTAAATATTATCCCAAA TCACAACCTTTGAATTCAGCCCAAGAAATCCAAAGCCTTTGATTGCTTGTATTTCGCATCGCTCAAAAGAAAAAG CGCAATCATTCGCCCTAAACGCTTTTAAACGGCTAAAGCCCTAGCGAGAAATTAATATGCTTATCGTTTGGGGC GCAATTACCGCTTAGGGGATTTTAAATTCACCTCTGGCCTCTAAAGACGCTTA	210	SNPDYISTHSEALDLKLLKKNQMNNA SAIEIAHLLNQDDDLKAKEQALYDLGA LYARIKDFKNAHLYNLQYLQDHAELDK ASVVRARDEKALFSM:EGNTQEKIAHYIG KIQNFPSNEALKALELKAQLLFENKRQ YAEVLSMQKNLPKDS:PLIQKTLNVLAK TPLENHRCEEALKYLSQITTFEFSPEE IQAFDCLYFASLKEKAIQIINALNAFTAKA PSEKLIWLRLGRNYYRLGDFKNSTLA SKDAL
HP0336	211	AGAGAGAAAAAATCATCCACCTAACGATGACGTGAACATGCTCAAGCTCCACGACACTTCCCTACCGCAAT GCACATTGTGAGCGTGTAGAAATCACGCACAGACTGCTCCCTAGTTTGGAGAACTGTTAAAAACCTTTAAAGAAAA AAGCCAACAATTTAAAGAGATTGTCAAGATCGGACGACGCAATTTACAAGACGCTACGCCCTTTAACTTTGGGCAAG AATTAGCGGGTATCGGAGCATGCTAGAGCATTTCTAACAAACAATTTTAGAGAGTTTGAGCATTTAAGAGAATTAG CCATAGCGGGACGCGGTAGGCACAGGGCTAAACGCTCATAAAGAAATTGAGCGAAAAAGTGCTGAAGAATTGAG CCAGTTTAGCGGGTGAATTCGCTCTGCGCCCAATTAATGAAATCGCTAACGATATTAGATGGCTTGCAGCGGGCCG CGCATGGGGCTTTTAAAGCTTTAGCGGGCAATTTAATGAAATCGCTAACGATATTAGATGGCTTGCAGCGGGCCG CGCTGTGTTTGGCGAGCTTAATATCCCTGAAACGAGCGCGGAGTTCTATTATGCCGGTAAAGTCAATCCAC GCAATCGGAAGCATGACAAATGGTGGCGGTGCAAGTGATGGGAATGATACCGCTATTGGCATTGGCGCCAGTCA GGGTAATTTGAATTGAACGTGTTCAAGCGGTGATCATTTATAATTTCTGCAAGTTTAAAGGCTATTGAGCGGATAG CATGGAAAGTTTAAATATCATTCGCGGACGCGCATTAGCCTAATAGAGAAAAAGATTGATTATTACTTGCACCATTC TTTGATGTTAGTAACCGCCCTAAACCCGCTATGGGCTATGAAACGCGCTAAATCGCTAAAAACGCCACAAAA AAGGCATTTCTTAAAGAAAGC	212	REKLIHPNDVNMSQSSNDTFPTAM HIVSVLEITHRLLPSLE:VLLKTFKEKSQ QFKEIVKIGRTHLQDA'TPLTLGQEFSGY ASMLEHSKQQILESLHLRELAIGGTAV GTGLNAHKELSEKVAE:ELSQFSGVKFV SAPNKFHALTSHDAIAYAHGAFKALAA NLMKIANDIRWLASGPRCGLGELNIPE NEPGSSIMPVKVNPTQICEAMTMVAQV VMGNDTAIGIAASQGNFELNVFKPVIY NFLQSLRLLSDSMESFNHCASGIEPN REKIDYYLHHSLMLVTALNPHVGYENA AKIAKNAHKKGISLKE
HP0336	213	GAAGATTAGGCTCGTTTTTGAAGACGCTTTGGGTTGGCGTAGGGGAGTAAAGGCAAAAAAGCTCTATCGC ACCGGATTATTGCAAAACCTTGAATTGAGTTTCAAGAGCGGTTTGGCTGTAAAAAACCATTAAGTCCAATA CCAGAGCGTTTGTAAAGTTGCGATGGCAGCGGCTAAAGACAAAGCCCTAGAGACTTGCAAGCAATGCAATGGG CAGGGGCGAGTTTATGCGTCAAGGTTTATGAGTTTGCACAACTTGTGGGCGTGTCAAGGCAAGGGCAAGA TCGTTAAACCCCATGCCAAGCGTGCAAGGTAAACCTATATCCTTAAAGATGAAGAAATTGATCGGATAATCCCTG AGGCAATTGATGATCAAAACCGCATGCTGCTTAAATAAAGGCAATGAATACGAGAGGAAAAAGAGGGGATTG TATTTAGAGCGCAAGTCAAGAGATGAGCATTTCAAGCGCAAGGCTGCGATTATTTCATTAAAGCGCCGCTGT TTTACCACTATCGCTTAGGGCATACGATTAAAGTGGCGTCTTTAAAGGGGACGAACTGGAAATTAATAATCCCTAG AAACGCCAGACAGCAGACTTTTGGCTTAGAAACG	214	EDLGSFFEDAFGFGAF:GSKRQKSIAP DYLOTLELSFKEAVFGCKKTIKVQYS VCESCDGTGAKDKALF:ETCKQCNGQG QVFMRQGFMSFAQTCGACQCGKIVK TPCQACKGKTYLKDDEIDAIIPEGIDQ NRMVLKNKGNEYEKGRGDLYLEAQV KEDEHFKREGCDLFIKAPVFFTTIALGH TIKVP:SLKGDELELKIPIRNARDKQTFAR RN
HP0336	215	TCCAACCCAGATTTTACGCCCTTTAGTGAAAAAATTTGACATCCCTTATTTTATGCGCCTTGGGACAAATCAAGTTT TGCAATGAAAAAGAGTTTGAATAATCATTAAAAACCTGGAATTAAGCACAAGTGAAGTGCAGACTTGCTCGTTTATG CCAAATACATGCGCATTTAAGCCATGATTTACGAAGCGCTATGAAACCGAGATCTTAAATATCCATCATAGTTTCTT GCCCGCATTCATTGGGGCTAATCCTTACCAGCAAGCGTTTGAAGGGCGTGAAGTCAATCGGGCCACGCGCAT TTTGTGAATGAAAGCCTTGATGCTGGGCCGATTATCATACAGACACTCTGCCATTAAACCAATTAACAGCGTGGA AAAAATGCGCCTAGCGGTAAGGATATAGAAAACTGTTTATGCTAGGGCTTTAAAACTCGTTT	216	SNHEILRPLVEKFDIPYFYAPCDNQVLH EKEVLEIKNLKELKHV:SADLLVLAKYM RILSHDFTKRYENQILNIHHSFLPAFIGA NPYQOAFERGVKVGATAHFVNESLDA GPIIIQDITLPIHNHYSVEKMRLAGKDIEK LVLARALKLV
HP0336	217	GGAGCTTGAAATTTTAAATCTTATCTTAAATCCCTTATCTTACTAGAGACCAACCCCTAAATTCGAAGGCTTGT TTGAAAGATTGAGCCAAAAATCAGCGCTTTTCCCAACTAGACACTCAAAACAGCTCTTACTCACTTCCCTA GCCCAAAAAATGCCCCTAGAAAAACGCCATTACTGAATTGCAAAACGCTAAACCATTTAGAACTTTAGAGCTTTT CTTATCACATTTTAAAGCGGATAGAAAACTTGAACCTGCTCACCCGCCCTTATGAAACCCAGCCCAATGCTAGACAGCA TGTTAGCGCAATTTTGGCTTAGGCAATGAAACCGCTTAAAGATGGATT	218	ELEILKSYLKIPIYTLLETNTLNSKACLKD LSQKISAFFPKLDTQNF:LLTSLAQKIAL ENAITELQNAKNHLETLELFSYHILSAIE NLNLLTRPYETSQMLDSMFSEFCGLK

HP0336	219	CACCATGGCGCTATCGTACCCCTTTAGGCAAGGGAGCGATTAGCATCAATAAATCAGGGCCATAACGCTCTAA ATATCCTCAAAACAACCTACCCCAAAACAAGACTTACCCCCAGATACGCTTATGTGACGATATTTTCTAATGGTG TTTTATTGGACAAAGCGTTAGTCATTTATTTCAAGCCCTTATAGTTTCACTGGCAAGATGTGTGCGAAATCCAAAT GCCATGGAAGCCCTTTTAGCGCAAAATATCTTACAGCTTGTGAATTTAGGGCTAGGCTTCACTCATCTTTGT GAATTTAGTAAAGCCCTTTTAAACCATAAATGATTGAGCGAGATTGAAGCGAGCTTCACTCATCTTTGT GAAGATGAGAGCGTTTAAACGCTCTAGCCAGGAGTTAAAGGCGAGTTAAATTTTATTGAAGAAGCTAGAGG TAATCTTTTAAAGCTTTTGGCCAGCTCAGAACTTTGATTGATTATAGCGAAGACATTCCTAGCGATTTTATTAGAT GGAGTATCTCTTAATTTAGAAAACAATCGCCTCTTTTAAAGACTTATTGGATTCTTAAATGCTCAAAACAAGGA ATAAGGGCATGCTTAAGCATTTGTTGGCAACCCCAATGCTGGCAAAAGTTCTTTATTAACGCCATGCTTTTAGAAG AAAGGGCTTTAGTGAGCGATATTAAAGGCACAACAAGAGACACCATAGAAAGTCAAT	220	TIAAIATPLGKGAISIIKISGHNALNLIKQL TQKQDFTPRYAYVHDIFSNGVLLDKAL VIYFKAPYSFTGEDVCEIQCHGSPLLA QNILQACNLGARLAKAGFEFSKKAFNL HKMDLSEIEASVQLILCEDESVLNALAR QLKGELKIFIEEARGNLLKLASSEVLID YSEEDIPSDFLDGVSLNLEKQIASFKDL LDFSNAQKQRNKGHALSIVGKPNAGK SSLLNAMLLEERALVSDIKGTTTRDTIEE V
HP0336	221	ATTGATGCGTTAGTGAGCGCTTATCATTTGCAAGATGAAGATTGTATTATCATATCTAAAAATTCGAGAGACACTT TGTATAAGACTATAAAAGTCTTTTATTCCTAGCCTACGCTCAATCCTATTACGCCGGGAGTATTTTGAAG CCCTTTCGCCCTTAATGCACCCCTAATTCACCGCTTTTAAAGCCTAATACGCGCTTAGCGTCTAAATGTTTTGAT GTTTAAAGATGAACGACGCTTACGAGCAATTACAAAAGCGCAACGCCCAAGATGAGCTTGCTTTAGGGCTTT TGCAGGCGGCTTTGGCCATTACAGCAGGCTTTGGAGCATTTGACGATTTTGCACAACTACCTCAAAAGATTTA AACGCTTTGATGGCTTTGGAATTTGGTAGTTTGA AAAAGCGCACACCTTAAAGCGAGCGCAAGCCTTAAATTAGC CAGCCACACCAAGAAGACACGCTATTAGCCAACTCTTTTACCCCATCAAGCCACGATA	222	IDALVSAYHLQDEDLYYHYLKIARDTLY KDYKKSFYSYAYALKSYAYAGEYFEALS PLMHPNSNAFLKPNTRLASKLFLMFKD ETNAYEQLQKSANAQDELAALGLQARL GHYKQALEHLQHLYHNYPKDLNALMA LELVSLKKGDTLKASEALKLASHTKEDT LLANSFYPIKPTI
HP0336	223	GAATCAGGGATTTCATTTGCCTAACGCTAACACGATCATTATAGATAATGCGCAAAATTCGGGCTGGCTGATTTGCAC CAATTGAGAGGGCTGTGGGAGAGGTAAAGAGGCTTTTGTATTTCTCATAGAAATCAAAAGTTTGAA TGAACAGGCTTTAAACGCTTGTCTGCTTTGGAAAAAATTCATATTTAGCAGCGGGAGAGTGCTTATCATG ATTTAGAAATCAGGGGGCGGGAATTTGCTCGGCAAGATCAGAGCGGCATATTAAAAACATTGGTTATGCACT CTATACGCGCATGCTTGAAGACGCGATTTATGAATTGAGTGGGGAAGAAAGGCTTGAAAGAGCGTAGAAATC CAACTGGCGTGAGCGCTTTTAAACCCCTGAACTCATTGCAAGCGATAGTTGAGATTGGAATTTATACCGCGTTTG AGTTTGTGTGAAATACAGATGAGTGGGCAATCCATGAAGAAATAGAAAGACAGGTTTGGCAAAATAGACGATTT GAGCGCTCAATTTTGCAAATCATTACGCTTAAATTTAGCCAAACAGCTTGGCATCATCAAACTTTCTAATTTCAAT CAAAACATCACCATCACTTATAGCGATGAAAGAAAGAAAGCGCTGAA	224	ESGIHLPNANTIIIDNAQNFGLADLHQL RGRVGRGKKEGFCYFLIEDQKSLNEQ ALKRLLALEKNLYSGGESVAYHDLEIR GGNLLGQDQSGHKNIGYALYTRMLE DAIYELSGGKRLEKSVEIQLGVSAFLN PELIASDSLRLDLYRRRLSCLCENTDEVG QIHEEIEDRFKIDDLQAQFLQITLKILA NQLGIKLSNFNQNTITYSDEKESLK
HP0697	225	CCAAGTATATCAATCGCCCAAGTAAGCTTTTGTGATAATCCAGTTTGTCTATGGCTATCATTTGGCTAAAGAACAA CATCTATAACAAAGCAAGTCAATTGTACAGAGGGTATTGGATGTGATTTTATGACCCAGCGGGGTTTAAAAA CGCCATAGCCACGCTTGGACAGCTTTAACGCCATCGCATTTGCCCTTGTAAAAAGCGCATCCCGAAATCCTTT TGAGCTATGATGGGATAAGGCGGCAAGCGAGCTTATAAGCGAGCTTGTGCTAAGAGCAAGAGGAG GGGAGGGTGATTTGTTGAAAAACAACCTGGATCCAGCGGATATGCTAATGGCCAGATTGAAACCTTAAAAA ATTGGCTATCGCACCCCATGGCTTTTATTGAGTTTGTGTTTAAAGCGCATGGCGATTCTCTTTTAGACGATCCTT TAGAAAAAGATAAGGCTCTTAAAGAAATGTTAGGTTTTTAAAAAATTTTCTTGTCTTTACAAAGCGAATACAGCC CTTAATCGCTACCCCTTTTCAAGCGCTTTGCTGCTTTAGGGATTAGAGAGCGAGTCTCTTTTCAGCCCTTTTACCC CAAAACAGAAAAACCCCAATCGCC	226	KYINSPQSKLFDKSSLLYGYHLAKEHIY KQKQVIVTEGYLDVILLHQAGFKNAIAT LGTALTPSHLPLLLKKGDPEILLSYDGDK AGRNAAYKASMLAKEQRRRGVILFEN NLDPADMIANGQIETLKNWLSHPMAFI EFVLRMAADSYLLDDPLEKDKALKEML GFLKNFSLLLQSEYKPLIATLLQAPLHV LGIRERSVFQPFYFKTEKPNR

HP0697	227	CACTCAAATGGCTTTTGATTTAATACGCCCTTGTTGCAAGTCCAGCACCCACCATGCCACTTTTATAGCGAGCGTCTT AGACGCATTGTTACAGATCGCATTTAAATCACCCCTTTATAGGCATTGCTGGATGGAGTGGCGCTTATGAAA ATAAGATTTATGGGCGGAGTGTGTTGGGGATTGGAACGCATTGAAGAACCCGAGGTTTGAAGAATTTTGG CTTTAGGGGGCAAAAGCGATCAAGAGCCTAGACGCTGTTTGAATCGCTTTAAACACCACTCAACAA GCTTTAAAGCGGTTCAAAAGCATTTTAAAGAAACGAAATTAGAAATTTTCCAACAATGCATGACAAAAAATTCAA AGCATAGCCACCAATTCATAGGCGTGTGTTTGATATAGTAGCGTTTAGTTGGATTAAACAGGAACGATTAGCTTT GAAGCAGAGAGCGGCGAGGTTTAGAAAACTAGCCTTACAAAGCGATGAGATCGCTTTTACCCCTTTTGAATCAA AAACAGCGTGTGTTTGAAGAAATTTTATCAAGCGTTTGAAGAGGATTGGCGTTTTAGAGCCTGAACGCGATCG CTAAGAAATTTTAAACGCCCTAGTAGAAATCATTACCGCTTAAATCGTGCCTTTTAAAGAGCATGTGGTGTGCA GTGGGGCGTGTGTTTGAACCAATTATTATGCGAACCAATTAGCCAAACGATTGAGAGGGCTAAAGAGGCGAGTATTT TCCACAAGCATTTCCCGCTAATGACAGCAGTATCCCTATCGTCAAGCCTTAATGGCGTATTTCAACCCCTACAATC ATCAAAAAAGGATAAAATGGATAGCGTAACCTAGCATCGGGAACGGAGGGAAGAAACAAACGCTTTGATTGAG CGAGTCTTTATGCCCTATTTAAAGAAATGGATTGTTCATTGATGAAGACGCCCTAAATTTGAAGCTAGTGGGAA TATTGGGAGCACGG	228	TQMAFDNTPLLVQHHIAHFLASVL DALLQDPLNHPFIGIVWDGSGAYENH IYGAECFVGDLERIEETARFEFWLLG GQKAIKEPRRLVLEIALKHQNLKLLKRV QKHFEDELEIFQQMHDKIKQSIATNSI GRLFDIVAFSLDLTGTISFEAESGQVLE NLALQSDEIAFYFPEIKNSVCLKEFYQ AFEKDLGVLEPERIAKKFFNSLVEIITALI VPFKEHVVCSSGGVFCNQLLCEQLAK RLRGLKRQYFFHKHFPPIINDSSIPGQA LMAYFNPTIIKKG	QGLPPTINQEMPDECDLDYIPNAARE KRVDVMSNSFGFGGTNGVVIKKA
HP0697	229	TCAAGGAATCTTACCTCTACCATCAATCAAGAAATGCCAGCCAGAAATCGGATTGGATTATATCCCTAATGCGGC CAGAGAAAAGCGAGTGGATGAGTGAATCACTATTGGTTGGTGGCACTAATGGTGTGATTTCAAAA AAGCCTAGTTTACAAAGTTAGGATTTGAATGGCCGTTTATTAGATTTGAAATCATATTAAAGAGATTCAAAATG AAATTGAATTAGCCCTTATTAGAGGCGATGAGGACGCTAAAGAAATCTTAGAAAAAGATTGGATAAGGAGGTTAAAA GCATTTATCCAACTCACTGATTTTCAAAACTCCAATTAGCAAGACACCTGACAGACCCCTACGCTATGGATTACA TTGATCTCATCTTAAAGATAAATATGAAGTCTTTGGGATAGGCATTATAACGATGATAAAGCGATCGTGTGCTTTG TAGGGAATAATTGATAATGTCCTAGTTGTGCTATCGGAGAGAAAGGGCAGAGGACTAAAAACAACCTCTTAAGA AATTTGGCATGCCCTAACCTTGTGGCTATCGTAAGCTTTGAAATGGCAAAGTTTGTCTGAAAAGTTTAAATTTGCCT ATTTAATGCTTGATACAGCCGGGCGTATCCGGGATTGGTGCAAGAAAGGGGCAAGTGAAGCGATCG CTAAAAATCTCAAGAGTTCGCTCTTTAAAGTCCCTACTATTTCTGTAATTCGTTGAGGGGCGAGTGGTGGT GCGTAGCGATTGCGATGCTGACAAATTTGGCTATGATGGAATATTCATTTTAGCGTTATATCCCCAGAAAGTTGT GCGCGATTCTTTGGGATGACCCCTAGCAAGACTGAAGTGGC	230	QGLPPTINQEMPDECDLDYIPNAARE KRVDVMSNSFGFGGTNGVVIKKA	
HP0697	231	CATAATGTTGGGAATAAGCAGTTGCAACTTCAATCAGTCAGAAAGATTCTGAGATTGCGGAGTTAAAAAAGAAAGT CAATCTTTATCAAGCCTTTAAATTTGTGCTGATGAGGTTTGTAGGTATTAAAAACAATAAAGTCGTTTTTAAAA GTGGGAATCTTGAAGCTTGAACAATTTAGAAGAACAAAGCGTTCAATTTAAAGAAATGCAGAGAGCGTTAATTTAC AAGGGTTCCTTATCTTAAAGAGCCAAATATTGATGGCTGCAGTATTTTTCATTGGCTAAAAACACAAAGTTGTGT GGGGAATACCATAAAAATGATTTGTTAAGACTTTTTCGCGAGCTTAAAGAAAGGCTTAGAGAACCGCAAGAA GCATGCAGTATTTCCATCAAGAAACCGGTGCTCTTTAAATGCAGCTAAAAATGGCGAAGCGCATTTCTACTGAAGGA TTGGGACGGTTAATAAACGGGCAAGACATTGAATCGCTTTATGAAAGATGCAAAACGCCACTTCGCTAGCGGA CTCTCTCAACCAAGGAGCAATGAATCACTCAAGTCAATTTCTTTGATTGATGATATTGCAGAACCAACCAATCTATTA GCCCTAATGCCGCTATTGAGCCCGCGAGCGGCGAGCATGGAGAGGTTTTCGGTGGTGGCTGATGAGGT GAGAAACTCGCTGAAAAAACCCAAAGCCACTAAAGAAATCGCTGTTGCTGTTAAAGCATGCAACAAAGACCGA ACGATATTCAACCAATACCCACGATATTAAATCTATTGTAAGCTCTATTAAAGGCGCATGTGAAGAGCTTAAATCCA CCGTAAAAAATAACATGATTGTTGCGCAAGCGGCAAAATACACCATCTACAATATCAATACCGGGTGTGTTGCGGTT TGCCCAAACTTGATCATGTGCTCTTTAAACCAATCTTTATGGCATGTTTTTGGTCTCAATTCCTTTGATATTACCG CCATAAGAAATTGC	232	IMFGNKQLQLQISQKDSEIAELKEVNL YQSLNLCLHEGFVGKKNKVVKFSGN LASLNNLEEQSVHFKEA/ESVNLQGV YSLKSONIDGVQYFSLAK'NTSCVGEYH KNDLFKTFCAASLKEGLENAQESMQYF HQETGALLNAAKNGEAFHSTEGLGTVN KTGQDIESLYEKMGNATSLADSLNQRS NEITQVISLIDDAEQTNLLALNAAIEAAR AGEHGRGFVVADEVRIKLAETQKAT KEIAVVVKSMMQEQEANDIQTNTHDINSIV SSIKGDVEELKSTVKNMIVAAQAAKYTI YNINRVFCGLAKLDHV/FKNLYGMV FGLNSFDITSHKNCRLGKWWYEGAGK ENFSNTSGYRALESVHSAVHAEANDL VKAVQEDHITDSKYLEHIKVLHLMEDSAK HVRNIDKMFYEKQDELNKIEKIQ	

HP0697	233	GGGATTGATGCGATTTAGAGATCTCAACAGCAACAGCTATTGCCAGATACGCTTACAAGTTTATGGCGCA GTGGTGAAGTCAAAATAAGACGGCGTGTGGTGGCGATGAAGCCAAACGAAAGCCAGAAAGAAATCTTG AAACAGAAAGGCTAGATCCATACCGGTAAACCAATGGATGGAGCAAGAAACGCTATCCTTGAAAGAGGCT TCCAAACAGGTTAAGCACATGTATCGGACTAGCTTGATCTCTCGCTAAGTT	234	DLNAILEDLNSKQLLPEYAYKVYGA SONKDGWVVGDEAKTKARRKEILENR KARSIPVKQWMEQERNAILEKEASKQV KHYATSFDLSPK
HP0697	235	AGACGCAATCAAAAAGCGCATCAAGTTTATCAACTATCCCTCTAAGTTCTTCACTCTATGCTATAATCTCTGTTT AAACATTATGGAATGTTAGAGATATTAGCAAAACCCCTTCCAAACCAACCAATCTAAGAAAGAAACCAATCAAGGA ACGATTGATTGATGAATAACCATTTTAACTTACTCATAGCCCTAATGTCTTTAGCGGTGTAACATGAGAAAA TATTTCAAAACCCGCTAAACACCAATTAAGGCGAAGCTATTTCCCTAACCATTTGCAAGAAAGTATCGTTTCGCT AATCGTTATGAGCCATTTTGAATAATGGAGCGGTATAGCGGATAAGGTTAACGCAGCTAAGAAATCGGTAAGAA CTTCAATTACGAAGCAGTTTTTAAATGAGAGTCAAGGTTTTTATTCTTGGCAAGATTGTTGAACAAGATTGAT AAAAAACAACAAGCAAGGTGGTAAAGCTGAAGAAACGGAATTGAATTAAGGGCTTGAAGCGGAAGTCCA AGATAAGTCTGTCAATCAAGTGAATTGATTAGCAATAACCTAACCCAGCCAGCCAACTATCTGTTATCTTTGGA GACTTTGCTTGAAGCAAGCGTTAAAGGGAATCTTTAGCGGTGGTGAAGGACCAATTCAGGAACTTATACG ACATCACTTCTCAAAATTTGCTTTTAGTGAGAAAGTTCCCAAGCACCAGCATCAATCTTTAATGGCGATGCTTA TTTTATGGATACGGTCTGTTTCCCATGCTAGTGGCGCTTGTGGTGGATTATGTCACGGAACCCCT ACGCTATTAGAAACATTTGTTATCAGCAGCGATAAGTTTAAACAATATCACCTACCTATCGTAGATGGCAATAACA TGATCGCTTCTACAGGAAAGGATACTCTCAGTAGTGAGCGGTCAAGAGTTCAACTATGATGGGATATTGTGGAT TTGCTTTATGA	236	DAIKAHQSLSTIPLSSSLYAIISVLKHY GMLEDIQNPSPKPTNLKKTETIQGTH
HP0697	237	AGACGATCGCTGTTTTTATCACTGATCTCGCTACACTCAAGAGCTAAGAAAGCGTTAGCCTAAATGGCGT TTTAGCGGAAGTGGTAGAATCTAGCGATTAGTGCAAGCGCGATTGATTGATTGTTAAAGTTTCGGTTAAAAA CTTTTIGACCCCAATCAAGTGAATTAACAACCTACAAGCGTTTAAATTCAGCGCTTGGGAT	238	DDRSFFITDSRYTQEAKESSVQPKNGVL AEWVSSDLVQSAIDLIVKSSVKLFFD PNQVNLQTYKRLNSALGD
HP0697	239	GCTTGGCTACAACATGGCTTAAATGGCGATGGTCAATATTTAGCGGAAATGAAGCGTTCCAAGAAAGCCCAAAAA ACAACCCCTAATAACCCCATTAACAATCAAAATAAAGGGGCTACCCATGAAGGATTAGAAAGAGAAATCGCATTC ACGCTCAATGAGAAATGCGATGTTTGTAGTGCTTATAGTGGATAACGCTTTGTTTGAATTAGCGATCGC TCGTTTTTAA	240	LGYNMALMAMVNILAEMKAFQEAQKN NPNPNINQK
HP0697	241	CTCTAAGAGAGCTTGATGCTATGCCATTAATCAATTAGAGTGGCGATGCAATTTAAGAGTTGAGTCAGATTTTAGA GAGCACTATTACAGAAAGGGCTTTGTGCTTTGAAGGATTTGCGGCGATGGCATTGGTAAAAACCCCATGAAG AGCAGAGATCCCAACTACCTAGAAAAGCGCTCAACCTAATAGCGGCCCTAAATCAAGAGGGCATGGTATTT TGCTTAGAGCCTATGTTGTCAAAAACAGGCGAGCTAAATACTAGCGGATAAGTGGAGCGTGGTTTCAGTGG ATGGGCTTAACACAAGCCACCATGAGCATACTATCGCATAGTTGGCAATAAAGCAGTATCTTACGGAGCGTTAA TGGCAAGAGATGATTATAGAGTGGATGGGAAAGTGAATGAGGCTTGCCTAACGCTACTTTAAGGTGGAGTTA GACAAATAGCATGGTGTGGCGGATTTCT	242	SKESLMHAINSRVGMHFKELSQILESTI TERGFVPLKGFCHGIGKPKHPEEIP NYLEKGVKPNSGPKIKEGMVFCLPM VCQKQGEPIKADKWSVSVSDGLNTS HHEHTIAVGNKAVILTER
HP0697	243	AACAGCTCAGCGGTGGCAAAAACAACGAGTGGCGATCGTAGGAGTTAGCGAATGGCCTGATTATTGCTTTGC GATGAAGCCACATCCGCGCTAGATTCTAAAACCCAGCATTTCTATTAAAGCTTTAAGCGGCATTCAAAAAAGCTT GATTTGAGCATCGTTTTCATCAGCGCATGAAATGAAGTGGTTAAGAAATGTGCAATCAATGTGCGTGATCAGCAGC GGCGAA	244	QLSGGQKQKRVIAIARSLANCPDILLCDE ATSALDSKTTTHSILTLSSGIQKKLDLSIV FITHEIEVVVKELCNQMCVSSGE

HP1423	245	GCCGCAATTTGTTGTGCAAGATGCTCAAAAGAGTGGGTTATTAAGTGTTCATGCGGTGATGCGTTTTCGGCTC CAGAGGAACTGGAATTCATGCAACATCTATGTGCGGATACAGCAGAAATAATGGAAGAGTGTATCTCTAA CTCTAGCTAGTACTACTGCAAGTGATCGGAGTATATTTGCCGATTGCGGCATCCTTTTAGATGTTGAA GCCCAACTCCTTGATCCTGTGATCCATGATTTGAGCCTGATATAGAGGTGTTTATAAAGATTGGCTAGGCATA CAGCCCCAGAAAGACGCTAAGATTGCTCAATCCTTTTATGAAAGAGGCTTATGCTCTTGGTGCTAAAGCTTG GGTGATTTAACTCAAGCAATTTCTCAATCCTAACAAATTTGGCTGCAAAATTAATAATTTAAGCTTTTCTTTT TTTGATTTAATACTAGGTATAATTTAATCCACCTAACAGGAAAGCTATGAAAGTAACACAGGCAATGCTAACGA CTTTTGGCCTAACAAACACGATATTTCTATCCTAAATAAGAAATGATTTTATGATTTCTATCAGCTATCTTTC AATAAATAAGGGTTTTTTTGACTAAAAAATTCATGCTTGATGGTGGTTATGGGCTTAAATTTGCATGCTTTT AGGGGTGTTTATCTTCTCACTAGCATGTCGGTTAAAAAATTTTAAGCGCTTATCTTAAC	246	PHLFVQDAQKQWVVKCSCGHAFCAP EENWKLHANYVRDTAEKMEEVYPKLL ASDTHWQVYREYICPCDGLLDVEAPT PWYPVHDFEPDIEVFYKDWLGIQPPE RR
HP1423	247	GCAGTCTTTACTCTTAAAGCTCAACGCTTTTGGAGCAAGTTAGAAAAAACTTTTGATAGTGGGTTAGCCATT GGATTTTAAACTCGTTACAAAGGTGAAACGCCCTTATCTATCTATCTTAAGATGCAACGAAAGGGCGGTTAATAT TGATGAAATTTTGAGCTTGTAGCCATTAGGATTTTATGAAAAACCCGATTGATTGCTATAAAGTTTAGGGATTATC CATTTGAATTTCAAAACCCATTGCTCTCGTTTAAAGATTACATCGCTTGGCCAAAGAAAAATGGCTATAAGACGATAC ACACGACCATTTTGATGAATCTTCTGTTTATGAAGTCAGATCCGCAC	248	QSLLLKLNFAFASKLEKLFDSGFSHSD FKLVTRVKRPYSIYLMQRKGAVNIDEI LDLLAIRILLKNPIDCYKVLGIHLNFKPIV SRFKDYIALPKENGYKTIHTTIFDESSV YEVQIR
HP1423	249	CGATATTTAAGCTCTATTTTGGAAAGGAGGCTTTTCGAAAGATTTTCTCAAAACTCGCAAGGCTTTTCTGGCTTT AATTTTCCAAATTCGCCCTGAAATTTAGACATAACCGCCCTTAAATGTCTCTTTTAGACACCCCTTTTAGGCA ATAAAAACAAGTGAGCATCAATATGAGACTTTTAGCCTTAAATCCCTATTGGCTGGAAGAGGCGGAAAGATTA GGTTCGCAACAAAGGGGAAACGGGCAACGACTAGGGCGATTGCTCTTAGAGATCCATATTGAAGAAAGATGA AATGTATAGCGCGAGAAAGATGATATTACCCAAATCTTTGATTTACCTTAAACGGCTCTTTTGGAGGGAAAT TGAAATCGCTACTTGGCATAAAACCTTAACCTAACCAATCCCTAACACCAAGCGATGCAAAAAATTCGCGCATTA AGAAAAAGGGATCAAAAAACAGAAAAACTTCGCATGTGGGGATTGATTGTCAGGCTCGTTGATTTGCTCTAAAC TGAACCGCTTCTAATGAGTTGAAGCGTTATTAGAAAAAGAAATGTAAGGAGGAATC	250	DILSIFGKGGFSQRFQNSQGFSGFN FSNFAPENLDITAAALNVSVLDTLLGNKK QVSINNETFSLKIPIGVEEGEKIRVRNK GKTGRTRGDLLLLEHIEEDEMYRREK DDITQIFDLPLKTALFGGKIEIATWHKTL TLTPPNTKAMQKFRIKEKGIKNRKTS VGDLYLQARLILPKTE TLSNELKALLEK EL
HP1423	251	GTGGCGGACGCGAGGAGTCAGGATGAGCGGAAATCTGAGCGCAAGAGGTTTGTGCGTTTAC AACCTTAGGACTTACACGAATAAAGAGGTAATAAACATTATCGCTAACCGCGTAACGCTTCTATTAGTGGTAGAG CCTAAGATTAAAGCGCTTTGATGGGAATTACGCATTGAACGGTTTATGAAGAAAGTCTGTTGTAGCGTGAAAAA TGCGGATCAAGAAAGCTAAATTTGTTTAAAGGAGAAAGCATATTGTCAAGCCAAAGCAATTAGCCGCGTTGGCGGT AGATTGAGGGGAAAGTGATTGCTTATGCTAGTGGGCATAAGGTGCATAAGGGGGGAAGTATCGCTGATATTATC CAAGAGGCTGGAATGTGCCTAATCGCATCCCTTATCGGAGCGAATGCTAGTCAAGGATAATGACC	252	VGGTASRSQDEREIVASKEGFVRFYNL RTYTNKEGKNIANRFRNASILVVEPKIKA PFDGELRIETVYEEVVSVKNGDQEA FVLRSDIVKPSLAGVGGKIEGKVYLP YASGHKVHKGGSADIQEGWNVNPNRI PYASELLVKDND
HP1423	253	CGTGTGGAAGAAATATCATGCTTTTTTACCGAAGCGAGCGGTTTTTAAACGAGCGGATCTTTAAGGATTATTTA CGCGTTTGGCTTATGGCATTGACGGTGCATGTTATCGTTATATCCCTAAATAGTCGCTGGTGAAATAAGAA GAAGTCCAAAAGCTTTGTGTTTAGCCAAAAGCATGGCGTTTCATTGACTTTTAGAGCGGCTGGTAGCTCCTTATCA GGCAGGCGATCTGCGATGGGTGCTGGTTATGGTTACGCATTTTTCAAGACGCTCAAAATTTAGACAACGCTCA AAGCATTAGCTCTCATCGGAGTATAGGGAGTAACGCGAACGCTTTATTGAAACCTTATCATAAAAAATAGGCC CGGATCCCTCTACGATAAACACCGCTATGATAGGGGGATTGCGCTAATAACGCTAGTGGGATGTTGCGGGGT GGAGCAAAACAGCTACAAAACCTTAAATCCTTAAGAGTCAATTTAGCTGATGCGACTCTTTTAGACACGGCCAATCA AGAGAGCGTTGAGAGTTTCAAAAACGCGACATAAGATTGATTGAAGGGTTTTGAATTTAAGAAAAAGAGATTTAGA AGATAAAGAATTGCATGCTTTAATTAAGAAAAATACGAGATCAAAACACCCCGCTATAGCTTAAACGCTCTCAT TGATTTTGAAGACCTATTGAATCATCAGTCATTTATTCATAGGCTCTGAGGGGACTTTAGGCTTTATTTCAAGCGT GGAATTAGAATCGGTGAAGACTACGCTTATAAACTTGCCTTATTGTTTTATGAAAATTTAGAGCGGATGTGCCAA AGCCGCTCAAATCTAGCCGCTTAAAGCCAAACCAACCTGAAATGATTTCTCAGCAGAGCTTATGGATTATGCGTG CTTAAAAAGCGGTGAAAGGTTTGAGGGCATGCTAGCGTGGTTTTAGAAAATCAAAAGAGCCTAACGCGATGCTTACTCA TTCAAAGCGAAAGCG	254	RVEENYHAFFTEASGFLNERIFKDYL RLAYGIDASCYRYPKIVAWVKNEEV QKLCVLAKKHGVSLTFRAAGSSLSGQ AICDGVLMVTHFFKDAQILDNAQSIQL SCGVIGSNANALLKPYHKKIGPDPSTIN TAMIGGIVANNASGMCCEQNSYKT LKSLRVILADGTLDTANQESVESFKNA HKDLIEGVNLNRKEILEDKELHALIKKY EIKNTTGYSLNALDIEDPIEIIHLFIGS EGTNGFISSVELECVKDYAYKTCALLFY ENLERCAKAAQILAAIKAKQPEMISSAE LMDYACLKSVKGLECMPSVVLEIKEPN ACLIQSESDPLILENSMQTILNALS PWVLDQISSDPSIYCSWWKIRKGFPI AASKRKSQSSVIIEDICFS

HP1423	255	ACGCTCAATATCCGTGTCCTAGGCTTAAGCCCTTAAGTTAGAGGATTCACITTCACAAAGCAAGCGATCCAAAAAGT TTGAAAGATTTAGCGCTTAAGGGCATAACATCTCTATTAGCGGGGAGACTTCAAGCGGTAAACAAAGCCTATTAAAC GCTCTTTTAGATTGCGTCAATAAAGACGAAAGGTTGAGCGTTGAAGACAGCAAGATTGGAATTTAAAGCGTT TAGTAATTGCGTGGGCTTTTAGTGGGCAAGCAAGCAACACGCGTTAATTATGAAGACGCTCTCAATATGGCCA TGCGCTTAACCCAGACAGGCTCATTGTGGCGAGATTGATACAGGATGCAAGTCAAGCGCTCTTTTGGCTTTAGGAAAC ACCGGGCATAAGGGCATGCTCTCAACTATTACGCTAATAGCGCTCAAAACACTTTAGAGCGCTTTTCACTGAATTTA AGCATGCGTTACATGATTCTTTGGATAAGGATTGATCGGAGCGTATTTAAGAGCGCGATTGATGTCGTCGAT GTGAATAGAATCAACAATGAGCGCAATCGCTGAAGTCTTATGGACTTAAGAGCTTAAATGCCCTAAATCCTTA AAAACCGCTTGAATCAGCATTTTGATCTATCGCCTCGCTATGGGAGCGTGAAAAA	256	TLNIRVRLKPLSLEDFTFKASDPKSLK DLALGHNILISGETSSGKTSLLNALLD CVNKDERVSVESQELDLKAFSNCV GLLVGKQENTRFNYEDALNMAMRLNP DRLVGEIDTRNAALFLRLGNTGHKGM LSTIHANSAQNTLEALSLSMRYMYS LDKOLMRAFYFKSAIDVIVHVNRINERQ IAEVLWTKE
HP1423	257	CTTAAAGAAATTTAAGCCAGATAAAGTCGGCATGCTTATAGCCACAGCGTGATGTGCGTATTGAAGTAGCGCC TAAATCCAAATTAAGCCCAATCTAATCAATTAACAAAGCCATAAAACGAGCGTCAAGACTCTTACACTTTTGAA AATTTTGTGCTAGCTCATGCAATAACACCGTTTATGAATCGCTAAAGAGTCGCCAAAGCGATACCCCTTAT AACCGGTGCTTTTATGGCGCACAGGTTAGGCAAAACGACATTTAAACGCTATCGGCAACCATGCCCTAGA AAGCATAAAGGTCGTGTTAGTCACTTCAAGAGACTTTTGACAGACTTTTAAAGCATTTAGACAAACAAACCATG GATCTTTTAAAGCAAAATACCGCATTCGACCTTTTCTGTTAGATGACGCTCAATTTTGAAGGAAACCCAAAG CTAGAAGAAATTTTCCACACCTTTAAGCAATTGCAGCCCAACAGCAACAAATCGTATTGATTTCAGACCGATCG CCTAAACACATCGCGCTTAGAAGATCGCTTAAATCGCGCTTGAATGGGATAACCGCTAAAGTCATGCCCTCC TGATTTAGAAACCAACTTTCCATTGTCAACAAATAATGCCAGTCAATCAATCACTTTGCTGAAGAGGTGATGGA ATAGATCGCCCAACACATCAGCGACAATATCGCCCAATGGAAGCGCGATCAATAAATCAGCGTGAACGCGAACT TGATGAACGCTTCCATTGATTGAACCTCGCTAAACCGTTTGAAGATTGCAAAAGATCATGCTGAAGGTTCAA GCTTGGAAATATCCTACTCGTGTGCGCAAGCTGAATCTCAATCCAGCAATCAAGTCTCTTCGCGCCAA AAAATGTGCTTTGGCGAGGAAATAGTCGTGATTTCGCCAGGCTTTATACCCCTAACCCACGCTCTCGCTCGC TCAATTTTGGATT	258	LKEILSQNKVGMHLAHSVDVRIEAPKI QINAQSNINYKAIKTSVKDSYTFENFV GSCNNTVYEIAKKVAQSDTPPNPVL YGGTGLGKTHILNAIGNHALEKHKVV LVTSDFLTDLKHLDNKTMDSFKAKY RHCDFFLLDDAQFLQGPKELEEFFHT FNELHANSQIVLISDRSPKNIAGLEDR LKSREWGITAKVMPDLETKLSVKQ KCQLNQITLPEEVMEYIAQHISDNIRQM EGAIKISVANLNMNASIDLNLAKTVLED LQKDHAEAGSSLENILLAVAQSLNLKSS EIKVSSRQKNVALARKLVVYFARLYTP NPTLSLAQFLDLKDHSSISKMYSGVKK MLEEEKSPFVLSLREEIKNRLNELNDK KTAFNSSE
HP0691	259	TCATTAAAGAGCGGCAAGGAATTGAAGAGGGCATGTATGTGAATTTAGGGATAGGCTTGCCACGCTTGCGCT AATGAAGTAGCGGGATGAATATCGTTTCCAAAGCGAGAACGGCTGTAGGATTGGCGCTTACCCCTTAGAGG GGAGCGTTGATGCGGATCTTATCAACGCGAGGAAAGGAAACCATTAACCGTGTGCGGGCGCTTCGTTTCAATAG CGCGGATTGCTTGGGATGATCGTGGGGCATATTGATTAGCGATTAGGGGGATGGAAGTCTCACAAATG GGATTGGCTAATTGGATGATCCCTAAAGCTCATAAAGGCGATGGAGGGCTATGGAATTTGGTGCATGGCGC TAAAGAGTGAATGATGATGATGAGCATGCAACAAATACGGGAGTCAAGTGAAGGAAAGGAATGCTCATGGCCT TAACAGGAAAGCGGTGTCATCAATTGATACGGATTAGCGGTGTTGAGTTTCCAAATACCGCCATGAATTAG TGGAATTGCAAGAGGGGTGAGCTTATGATCAAGTGAAGGAAAGACAGAGCTGAATTTAGGTCGCTTAGCTT GTAAAGGGGTGTTTATGTTTATTAAGGCATTTGACCTCAGCGTGGCTGTTTGGCGTCTAAATGTTTGGCGGA CTCCTTGTCTGTCGCTCTTTATCGTTTGTGCTGTTGTTTATGCTTACAGGGCAAGAGCGCTTTTCT GTCATTTCTAGTTGGGGGAATGGCGCTTGGACGCTTTAGGTTTCTATGCAATGGCCCTTATTTGGTGGTGGT CAGGCTCTGGCTAACGCTAAATTAGTCCAAAGCTTTTAAATATC	260	IKRAAKELKEGMYVNLGIGLPTLVANEV SGMNIVQSENGLLGIGAYPLEGSVDA DLINAGKETITVPGASFFNSADSFAMI RGGHIDLAILGGMEVSQNGDLANWMIP KKLIKMGGMGMDLVHGAKKVIVIMEHC NKYGESKVKKECSLPLTGKGVVHQLIT DLAVFEFSNNAMKLVLEQEGVSLDQV KEKTEAEFEVRL



HP0691	261	GGGGATTGAACAAGACGCTGATATTGTTTTATATATAGAGGCTATATCAATGAGGCTGAAGACAACAA AATAGACAAACTCAAAAAGAGGTAAATGAAGAGCGCAAGAGTTGTACTTAAAGTTAATGAAGAAAGCGGTAT CCACAAGCAAAATGGCAGCATTAAGAGGCTGAATCATTTGGCTAAACACAGGAATGGGCTACAGGAACGGTT TATACGCGCTTTAACGCTCCTTTACGCGCTATGAAGACATGCCATAGATCCCATTTAGAAGAGGCAAGAAAC TAAAGTGATTATGATATAGTTAACTTTGAAGACAAACCTTTACAGGGGCGTTTGAACCTTCTACGACCCGCAAA GAATACCTGGTGTGGGTGTTTTAAGCCTTTTATTGGCGATTAACTTTATTAAGATACTTGAATTACCAAAAGC TTGATTTTCAAAACCTACAAGTTTGAGCGCTCAATCTTTTGCAATACCTAAACTAAAGATCAAAAACCTATTT TGTTTTAAAGCTCCAATCAAAAACATGATCTTTACACCACCATTAAGAGCGCTTTAAAAAACCTCCAATACCGCCAT GCGCAATTTTGGCAAAATCAAACTTGCCTGTTCTTAGAGTCTTAAATCATGCTTTTTCAAACTTATCTTTTC TTTAACACGAAACAGGATTTCAATCGCATTTGGCGCATTTGACAGCGCTCATGAAAACGCTTTGGTGGGTAA TTTTATCGCGGTTATTTATAGGGGATAGCTTAATAAGACTTAAGGATAGGCTAACCGCTAGGATCAACC ACTTACTAGCCATTAGCGGGTTCCATTAGGGATTTTGGCGTTAGCGTATTTCTTCTCTCTTTTATACCCC CTTACAAAACGCTATTTCCCTTATAGGAACGCTTTTATGATATAGGGTTTTGGTGGGTTTTTGTCTGGGTAT TTGTTGC	262	GIEQDADIVLFLYRGYIYQM/RAEDNKID KLKKEGKIEEAQELYLKVNEERRIHKQ NGSIEEAEIIVAKNRNGATGTVYTRFNA PFTRYEDMPIDSHLEEGQETKVDYDIV TT	LFSSADKYDSGCGWPSFS<PINKDW KYEDDESINRKRIEVL<SRIGKAHLGHV FNDGPKELGGLRYCINSAAALRFIPLKD MEKEGYGEFIPYIKKGELK<YINDKKSH
HP0224	263	CGTTATTTCTTCAGCGGATAAATACGACTCCGGTTGCGGGTGCCAAAGCTTTCTAAGCCTATCAATAAGATGTG GTGAATACGAAGACGATGAGAGCCTTAATAGGAAACGCATTGAAGTGTGAGCGGTATTTGTAAGCGCATTTAGG GCATGTGTTTAAACGATGGCCTAAAGAAATTAGGGGCTTAAGGATTGTCATCAACAGCGCGCTTAAAGGTTTATCC CCTTAAAGACATGGAAAAGAGGGTTATGGCGAGTTTATCCCTTATATCAAAAAGGGTGAATTGAAAAAATACATCA ATGATAAAAAGTCGCATTAAAGGGTAAAGCTAAGCCCCCTAAGGGGTTAAATGAGGGTTTTAAGCGTTTGGGT TGCTTATGGGTATCTTAAAAACGCTAATAACCGCTTAAATGATTTATTTAATACCTTACCTTAAACCGCTCT CTTAAAGCTTTATGGCTTTGTTCTTAAATATCAATAACTAAAGCTTTTAACTTTTAAATGAGGTTTTTAAATTTA TTTTTGTTCAAACTTATTTTAAAGGGGTGGGGTTATCCCATTAACACCCCC	264	LDVDAICDKKEVYIAGILQHIEEAGIHSG DSACFIPSTLSPEILDEIERVSAKIALHL GVVGLLNQFAVHQNLSLYLIEVNPRAS RTVPFLSKALGVPLAKVATIRVMVLEDL KEALKFYDKKNIVGYSGKVYKPKMPHF VALKEAVFPFNKLYGSDLILGPEMKST GEVNGIARSLGLAFFKAQTACFNPIKN KGLIFVSIKDKKEEACVLM/KRLVQLGF ELCATEGTHKALEKAGVKSILVKLISE GRPNIM	
HP0224	265	CCATTATTGGAAAGCGTTACGCATGCTTTAGAGATTAGTCTTAAACCCGCTTCTCATTGATAAGTTTTAGAAAA GCGGTGAATTAGATGTGGATGCTATTTGCGATAAAAAGAGGTTTTATATGCGGCAATTTACAGCACATTGAAGAA GCCGGAATCCATTACAGCGGATTGCGGTGCTTTATCCCTTCCACTAAGCCCTGAAATTTAGATGAAATGAGCG GGTGAGCGCAAAATCGCTCTGCATTTGGCGGTAGTAGGCTGTTGAATATCCAATTTGCTGTGCATCAAAATTCGC TGATTTGATTGAAGTCAATCCAGAGCCAGCCGACCGTCCCTTTTTAAGCAAGGCTTTAGCGGTTCTTTAGCCA AAGTGCGGACTAGGGTTATGGTGCTAGAAGACTTGAAGAAGCCTTGAAGTTTTATGATAAAAAAATATCGTTGGAT ATTCTAAAGCGGTTTATAAGCCTAAATGCCCATTTTGGGCTTTAAAGAAGCGGTTTTCCCTTTTAAATAAATTTA TGGATCGGATTTGATTTAGGGCTGAGATGAAAAGCACCGCGGAAGTGTAGGGATTGCTAGATCTTTAGGGCTT GCATTTTCAAGGCTCAACGCTTCTTTAACCCTTAAACCAAGGGGCTTATTTTGTCTTCTATTAAAGATAAGG ATAAGAAGAAGCATGCGTTTTAATGAAGCGATTGTTGAGTTGGGCTTTGAATGTGCGCCACAGAAAGGCACGCAT AAAGCTTTGGAAAAGCGCGGTTAAGTCTTTAAGGTGCTTAAATCTCTGAAGCGCGCCCAATATCATG	266	HYLESVTHALEISPKNPILLIDKFLKAVE LDVDAICDKKEVYIAGILQHIEEAGIHSG DSACFIPSTLSPEILDEIERVSAKIALHL GVVGLLNQFAVHQNLSLYLIEVNPRAS RTVPFLSKALGVPLAKVATIRVMVLEDL KEALKFYDKKNIVGYSGKVYKPKMPHF VALKEAVFPFNKLYGSDLILGPEMKST GEVNGIARSLGLAFFKAQTACFNPIKN KGLIFVSIKDKKEEACVLM/KRLVQLGF ELCATEGTHKALEKAGVKSILVKLISE GRPNIM	

HP0224	267	ATGGGGAATTGCACAAATACGACAATCTTTATTGGCGCTCAAAAGAGACCGATTGAGAAATGGAATCTAGCGCT TATGAAGAAGAGTTTTACTCTCTTACATTCAGCCCTAAAGAGCTTAAGCGGTTTAGACAAATATGTGATAGG CAAGAGCAGGCTAAAGGTTTTCCGTAGCGGTATACCAACCTTACAAACGCTTATCTTTAAAGAAAACTCAAA AAACAAGACAACCAAGACAGCAATGTGGAGTTAGAGCATTTAGAAGAGTGGAGTTAGCAAGTCTAATATTTACTA ATCGGCCCTACAGGATCAGGCAAACTTTAATGGCCAACTCTGGCCAAAGCATTTGGATATCTCTATCGCCATTAG CGATGCGACTAGCTTGACTGAAGCGGGCTATGTGGCGAAGACGTGGAAATATTTCTCAAGATTTGTCAGAACG AGCGACTGGAATGTCCAAAAGCCCAAAAGGCAATGTGTTATTGATGAGATTGATAAATCAGCCGTTTGTGAGAA AACCCTCTATCACTAGAGATGTTCTGGCGAGGCGTTGAGCAAGCTTGTGAAATCGTTGAAGTTCTTTAGT GAATATCCCCCAAGCGGCGAGAAAGCAACCTGAGGCAATTTCAATTAACACGAGCATATTTTATTCA TTTGTGCTGGAGCGTTGATGGTTAGCTGAAATCAATTAATAACGCAACGAGCAATGTGTTGGTTTCACTCAA GAAAGATGAGCAAAAGAGCAAGAGCGATCTTGCAATTAAGTCAACCCATGACCTGGTTACTTATGGGCTTAT CCCTGAGCTTATGGCGGTTTGGCGGTTTAAAGCAGCTAGATAGCATCAGTTTAGAAGCGATGTTGATATTTTAC AAACCTAAACGCTCTTATCAAGCAATACCAAGCAGCTTTTCAAAATGGATGAGTGGATTTGATCTTTGAAGAAG AAGCCATTAAAGAAATCGC	268	GELHKYDNSLLALKRDRRLRRMESSAY EEFFLLSYIPAPKELKAVLDNYVIGQE AKKVFSVAVYNYHYKRLSFEKELKKQDN QDSNVELEHLEEVSKSNILLIGPTGS GKTLMAQTLAKHLDIPIAISDATSLTEA GYVGEDVENILTRLLQASDWNVQKAQ KGIVFIDEIDKISRLSENRSITRDVS VQALLKIVEGSLVNIPPKGGRKHPEG NFIQDTSDFICAGAFDGLAEIKRRT QNVLGFTQEKMSKKEQEAHLVQTHD LVTYGLIPELIGRLPVLSTLDSISLEAMV DILQKPKNALIKQYQQLFKMDEVDLIFE EEAIKEIAQLALERKTGARGLRAIEDFC LDIMFDLPKLKGSEVRITKDCVLKQAE LIAKT
HP0224	269	AGGTGTTCAAAGACAGCAAAAGACGCTTGCGGTTTCATCTATGAGATCAGCGATTGAAAGCCTATACCGCA TTGCTAAAAAACAAGACCGATACGCTATTTATTGAGGTATCTCCCTCTAGGTATGGCCAGCATTTTAACGACT GCCCTTTATGTCAATACCTGATTTGACGCTTTGAAAAGCTTTGGTCTTATTATACCAACTTGGATTGCGAG GAGGCAGGATCAGCGCATCAAGCAAAACAGTATCAACATTAATAACGTTAAAGCAATAAGAGCGTTGAAACC ATCAAAGAGCTTATGATAGATCAGCTCTTATAACACCTTTGATCAATACCTCTATACCTATGGGATAGCTCTT CTGTTTATCATAGCAATGGTGGCTGCTGCTTAGCCCTAGCTAATTTTTCATGGCAGATGAAGAGAAACCCCAT TTATCGCTATGATGCGGAAACCAAGTGAGCATATTTGCCAACAACGCCCCAAAGAGGCGATCAATGGAACGC GGATTTTGACAAAGAAAGAGAAAGATGGTAAATTAATCGCGAATTAACCTTTAAAGCGTAAAGAAACGC GCATGCTTTAAACGGGATTTGATGAAAAAGAAAAATTTATGGAGGCAAGACACGCAAGTGAATGATGCTGTTA TGACATCACTAAAGAAATGTATAGCAATATAGGAAGTGGAAATGAGAAATCCCTCCCAAG	270	VFKDSKDAACGFIYEISEFMKAYTALLK KQDRYVYLLRYLPSRYWASILTALYV KYPDFDALKKLLVSYYQTWAGGTITR IKQTSINIKNVKSNIKSVETIKELILNSIDS YNTFDQYLYNLWDSSSVYHSHKWVRPV LALANYFMADEEKPHFIAMDAETQVEH ILPQTPKRGSQWNAADFKEKREEWVN NIANLTLLKRRKNAHALNGDFDEKRIY GGKDTSKVISCYDITKELYSNYRKWNE KSLO
HP0692	271	GGAGCGGCTTATGCGCCCGCTATGTGGCTAAAAATTTGGTAGCGAGTGGGTTTGCATAAAGCGACCGTGC AGCTTGCTTATGCGATTGGGTGATAGAGCCAGTGTCTATTTATGTGAACACGCATACACGAGCAAGTATCAAGC GCTGAGTTGGAATAATGCGTGAATCGGTTTCAAACTCAGCCCAAGGCGATTATTGAAAGCTTGGATTATTAAGA CCCATTTATCGCTCAGCTTATGCGCATTTTGGCGCGAATTAGAGGAATTCACCTGGGAAAAACCAACAAA GCTGAGGAGATTAAAGCGTCTTTAAGCGTTAAAAAATATTTAAGGGTAATATTTAAAAAATTTTGTATAATCAAC AATTCACAGGAGTTAA	272	SAAYAARYVAKNLVAGVCDKATVQL AYAIGVIEPVSIYVNTHTNTSKYSSAELE KCVKSVFKLTPKGIESLÖLLRPIYSLTS AYGHFGRELEEFTEWKTNKAEEIKAFF KR
HP0692	273	GGTGAGGTGATGGTTTTGAAAGGAATTTAGCCATTGTTGAATGAAATCCTAGATTCTAACGCCATTGTATATTA TCTCGCTAAAAATTCATGAGATTGTTATCTTGTATTGAGTGTCTGCTTTTATGTACTGGCTGAAGAAAAATATCTTT AAACGATGACGCCCTTAACTAGTGCAATGGCAAAATGCATTAAAGAAAGTCCAACTGATTCAAACGCTCCAG CAACACCACTATAAAGCGGTGCAAAACCAAGCTCCTTTTGAACGCTTTTAAACAAAGCGCTAAATCATGGAAG TTGAAGGGCAAAA	274	GEVMVFERNLAIRLNEILDSNAIVYYLA KNS

HP0692	275	CTCCAGAGGGGTTATAAGGATAAACCTAAGGATAAACCTAGTAACACCGCAAAATAATGCTAACACAACCAA CAAAACAGCGCTCAAAACAATAGTAACACTCAGGTTATTAAACCCACCAATAGCGCGCAAAACACAGAAATTCACACC CAGCAAGTCAATTGATGGCCTTTTCTGGTGGCAAGACACGCTTGCTCAATATTGATCGCATCAACACTAACCGCTG ATGACGATTAAGTGGAGGGTATAAAGCTTCTTACCACCAATGCGGCTCATTTGCATATCGGCAAGGCGGT ATCAATCTGTCAATCAAGCGAGCGGCGTATGCTTTGGCAGGATCAAGCGCAATTTGAGTTAAGGCTGTACGG TTAAGAGTGAATAATCAAGTGGTGTATGCTTTAATACGATATTAGTTGGGAAGATTGTGAATTTAAGTGGATGCTCATA ATACCAAAACGGCACAGCCACTTTAATACGATATTAGTTGGGAAGATTGTGAATTTAAGTGGATGCTCATA CAGCTAATTTAAGGTATTGATCTGTAATGTTGTTCAACACCTTAGATTTAGTGGCTTACAGGTAAGGTCA ATATCAACAAGCTCATTACGGCTTCCACTAATGTGCGCTTAAACCTTCAACATTAATGAATTTGTTGTTAAGACCAA TGGGTGAGTGTGGGGAATACACTCATTITAGCGAAGATATAGGCAATCAATCGCATCAATACCGTGGCTTTG GAACTGGCACTAGTCAATCTTTCTGGGGTGTCAAAATTTAAAGCGGTGAAACCTGTTATAGATGAGTTTAC TATAGCCCTTGGAAATTTTACGCTAGGAATATTAATAATTTGAATCACCAGAAATTCGCTTCTTCAACCCCAAG AAAACCCCTTGGGCGACATCAAGCTTATGTTAATAATCTAACCCCTGGGTCAAAATCGGCTCATGGACTATAGTCAAT TTTCAAAATTAACCAT	276	PEGYKDKPKDKPSNTTQNNANNQ QNSAQNNSTQVNFPSAQKTEIPT QVIDPFAGGKDTVNDIRINTNADGT KVGKYKASLTNAHLHIGKGINLSN QASGRTLLVENLTGNITVDGPLRVNNQ VGGYALAGSSANFEKAGTDTKNGTA TFNNDISLGRFVNLKVDAHTANFKGIDT GNGGFNTLDFSGVTGKVNINKLITAST NVAVKNFNINELVKTNGSVSVGEYTHF SEDIGSQSRINTVRLTGTTRSFSGGVK FKSGEKLVIDEYFSPWNYFDARNIKN VEITRKFASTPENPWGTSKLMFNLT LGQNAVMDYSQFSNLTIQGDFFINNQGT INYLVRGGQVATLVGNAAAMFFSNN VDSATGFYQPLMKINSAQDLKNKEHV LLKAKIIGYGNVSLGTINSISNVNLEQFK ERLALYN
HP0071	277	TCATGGCGCAATCTTTGCGTTTCAATTATGTTTAGCGCGATCGGTTTGTAGTGTACTTTATGAATCATTTTC GTTTATTTATACAAAAGATCGTTAGTGTATTGATCCTTGGCGTGGCGATAGGGCGTTGTGTTGCTCTTTGTTTT TATTACAGCCTTATATTTAAACGCTCAAAAAGCGGCGAAGCGCGCTTCAAGTGTCTGAATTTGCCCGCTCGCA CGCTCAAAGCGAATGTTGTTAAGGAATGTTGTGCTGGTGTGCGCTTGTGTTTTTGGCGTTTGTGTTGGAAAAA TGTCCTTTAGTCCCTTTGATTTAATCAATGAGAGATT	278	MAQIFVRFNYVLGAIGFVWLLYEISFIY KRSLVYLILGVAIGALCLLFVYFYTPIYL NAQKAGEAALQSAEFARSHAQSEWLF KELFVLVCAIFFWRLLGKNVL
HP0071	279	AGCTTATGGCAGCGCTTTAGACGAAAGCCGTATCGCTTTAGAGATCGGTTGATAGCCGTGGGTATAAATTA ATTTGGTTGAAGAAGTTAATCAAAATCCCTAACCGCACCGAGTTGGATAAGATGTCTTAAAGTAGATGAAC GCATCAACTTAGTCTATACGCTTTTAGCGCTCAATTTTACGCATTTCCCTAGCGATAAACCCACCGCTTGCTCT CGCCCATTTGAAGCGATCAGCAGCCCAATTAAGAAATTTCAAGCGTGGCAACGAGTTTAAATAATTTTAGCG GGTTGATGACGCTTTAAACCAACCAATGGGATAAGGTAGAAACCCCTAAAGATTTAAGCATTTACCAAAAAG AGCATGCCAAAACCTCTATTATCTCTTCTAAAGTGGATTCTGAAATTTTAAACCCACACCAATTTTAAACCGC CTGACCTTGGCTTATATCTCTTCTGGGTTATGCTTTTATCGTTGATCAGCTCTCTGTTAAACACAGCATTC ATATTTGGCTCACTAAATCTTTATTTGCTATCTTCTGCTTGGCGCTCGCTCATCTATGCGGCTAGTTTACGCTG GTATGTAGCGGGCATTCGCTTGGAGCAACGCTTATGAGTCCATGCTTTATATCGCATGGCTTCTGTTATCGCAG GGTTATTTACGCTCCAACTCGCGCTATCGGCTTCTAGCTTTTAGCGGTATCGGCTCTTTGTGCTCATTTAG GCTTTATGGATCTCAATCGGCCATTTAGTCCGCTATTAATCCTATTGGCTCAATATCCATGCTCTGCTCATTTAG CGCTAGTTATAGCTTTTGGCTTGTGTTTGTGCTAGGATTTGAGTTGTTTGTGTTTATTTGCGCAACAAAGG GCGTTTCAATTTGGACAAAACCATCTCTCCATTAGCGCTATCAATGAATGAGCATGATTTAGCGCTGTTCTCATGCT CACAGC	280	LIGTPLDESRIAFRDAFDSRGYKLNVL EEVNQKSPNARNELDKDVLKVDERINL VYTTFSAQFLRIFPSDKTTAWLSPIEALS SPNKEISSVATEFLKNIFSGFDDALKTN QWDKVEKTLKDLISYCIKEHAKNLYLSS SKVDSEIFLNHTNFFNRLTLPYLLGLL FIVISSLVKNTIPNIWLTKILYFALLCAL AHSMGLVLRWYVSGFSPWSNAYESM LYIAWASVIAGFILRSKALSASSFLAGI ALFVAHLGFMDDPQIGHLPVLKSYWLN IHVSVITASYSFLGCLCFVLGILSLVFLR KQGRFNLDKLTILSISAINEMSMILGLFML TAGNFLGGVWANESWGRYWGWDPK ETWALISICVYALILHLFLGSHNWPFIL ASSSV
HP0071	281	ACTTAAATTCGTAGTGGGCAATTTGATTACGCCCGCTTTTTATGAGCCATTTTCAAAATGTGGCAAGCGTATTTT TTAAACAAGCGGTAAAGAGCAATACCTTTTGTGTTTATATCGCTTTTCAAGTGATTTCTATTCTCATTTT AAAGCCCTAGTTATAGCCAAAATACGCTTGAAGTGGTGTGTTAGCGGTAGCCCCCTATTGCTTAG CAATATCCCTTATTGTTATAGGGGTGATCGCTCATGGTGGCTTTTACATTACATGAGCTATTGCTTAAACTAT CAATCTCCAAATTCGTTTCTAAACCAACATTTCTCGCTCATCGCTTTTATCAAGCTGTGTGCGGTGGTCTCT GTGCTAATCTTATCGCTCAGCAGTCTGGAACCTGGTACTTCTCACCCCTAACTATCATCAACCATGCTTTGCTTG ACGCTTATCATCTCTTTTCTTTTGTATAGGCTAAGCGCTTGTGATGAGTGGCTTTAAGAGTGAACCTTTTA GCGATTTCTATAGCAACATCATAGCCATGTTTAAAGCGGTAGCGATGCTCGCCCTG	282	LKILLVGHLPVFFMSHFQMWQAYFLK QGVKEQYLFVYIAFQVISILHFLKASS YSQKIALSSLVLLGVSPLLLSNIPYCFI GVYALMVAFFTYMSYCLNYQFSKFVS KNNISSLSLSSCVRVSVLILSLSSLE LRYFSPLTITMIFALTILJILFFFLYKAKP FDE

HP0071	283	CTAAGCGGCGCCCAACGATTTAGCACCCTCAACACACCCCAAGAGAAATTTGCTAAGCAGGATTTCTTT GAGCATGCCAGGATTGAATGATTTAGGCGCATCAACACAGGTTTATCTCAAGGATAAAAGATATCTAACCCCT AAACAAAGGCTTTTAGAGCATGTGGCCATCTTTAGCTCCAAAGAAACGCGAACCCCTTAAAGAGCT CCCCCTTTAGCAGCGGATAAACTCAAGCTTTAGAGTGGCTTTTAGACCTACGCTCAATAACAAAGGTTCAA CACCCCTTATAGCGCTTCAAAACCACTCTTGGGCTAACGAACAGCTTTTAAACCAAGATTAGGCACCTTAG CATCATTAAACCCCTGACTTTCTATGATGATTTGCAATTAATTAATCGCATCAATCGCCCAATAACCTTATC CCTAGCTATGTATCACCCTGTTACAGCGGCTGATTTGACAGCTACACCTTTTCAAGCGTCTTTTAGA AAATAGCGACAAATAATTGAAATAATTGAAGATAAAGACGCTAAAGAAATCAACGCTTTTCAACACCCCTCTTTTA TCCAGCGTGATAGGATTTTACACCTTGGCTTCACTAAAGATCCTCAAGGTTTGAAGCTTAAATGATTCAGAA ATCGGCTCTTTGAAAGCGGATTTACCCCTTACCTTAAATGAAGGATTTGATGCTATATTGGCCCTAAGGAT TACCGCTCTTTGAAAGCGGATTTACCCCTTACCTTAAATGAAGGATTTGATGCTATATTGGCCCTAAGGAT GTGTTGTTTACTGGATTTATGATCAATTCGTTGGCAATGGGTTGGCTATCATCTTTTAAACGATTATCGTGC GCATCATCCTTTATCCTTTAAGCTATAAGGGCATGGTGAGCATGCAAAAGCTCAAGAAATTAGCCCTTAAATGAAAG AACTCCAAGA	284	NAPNAQHFTTQTTPQENLLSTISFEH ARIEDSLGRIKQVYLKDKYLTQKQKG FLEHVHGLFSSKENAQPPLKELPLAA DKLKPLEVRFLDPTLNNKAFNTPYSAS KTTLGPNEQLVLTQDLGLTSLIKTLTFYD DLHYDLKIAFKSPNNLIPSYVITNGYRP VADLDSYTFSGVLENSDKKIEKEDKD AKEIKRFSNTLFLSSVDRYFTTLLFTKD PQGFALIDSEIGTKNPLGFISLKNEAN LHGYIGPKDYRSLKAISPMILTQVIEYGLI TFFAKGVFVLLDYLQYFVGNWGWAIL LTIVRIILYPLSYKGMVSMQKLKELAPK MKELQEKYKGEQKLQAHMMQLYKK HGANPLGGCLPLILQIPVFFAIYRVLYN AVELKSSEWILWIHDLSIMDPYFILPLLM GASMYWHQSVTPNTMTDPMQAKIFKL LPLFTIFLITFPAGLVLYWTTNNILSVL QQLINKVLEN
HP0071	285	CTCGGTTAAGGAGTGCGGAAATAATTAGGATTTCTAATTATCATGCCCATTTGACCCCTGAAGATAAGGCTCAA CCATCAGCTCTTATAAGGCGGTTTGGCGATGTAGCGGATGGCAATAATGATCGTTAGCCTTAAACAAAGCGAG CGTTCTTTAGGTTTGAATAAGCGCTTTGAGTAAAGCGCATGCGATATTTGCTTTAGAGAGGATTTGAGTTT GCTAAATAAGCGTTTGATAACGCTCAAAAGCTATCAAGTGCTGTTGCAAAACATTGTTTGAGCTTGATTATAAC GCTATTTTATCCCGTCTGCTATGCTAGGA	286	SVKECAKKGISNYHAHLTPEDKAQTIS SYKGVCAWVGDNNDALALKQASVSL GFEKSALSKSACDILLLEEDLSLLKAF DNAQKVYQVVLQNVLSLIYNAILIPVAM LG
HP0071	287	TTTTGCTGCACGGGTGCGTAGGGTGATGCGTTATTGTTAGATTGAAATTTAGAGAGCTTTTATGACAAATTA CGATTCCACTTTAGCCCGGTAAACGCCCAAGATTCAATGAGCGCTTTGGAATTAGAACAAGCCCTTGAAGAAACA ATAAGGGCGATTTATCCTTAATCTTTTGTAGAAATAAGCGATTGTAACGCTTGTGGCTCAATCAAAAGGTTT AGAACGTTTAAAGTGGGTTAAATAAGTGAAGTTGAGAGTTTGGGCTATGGGCTAAATTTATAATGCGCAAAATTA TAAACCTAAAGAGATTATTCAATAAATTGAGAGTTTGGGCTATGGGCTAAATTTATAATGCGCAAAATTA TAAAGCGCAAAAGAACAGCGCTCCTACTTGTCTACCTTGGGCTGAGGTTTGTCCACTATGAATTTGATGTTA TCGCCATTGCCAATACGCAAGTTATGGTGGCGCAAGTTATGGCGGTGCGAATTATGGCGTGGCATGGATAAGCT TATGCAAGGAATTTGGATCTCGTATCGCTCTTTTAAAGCTTTGTTAGTGTGTTGGCGGTTTGTTCATTAA GGGGCGTTTATGGGCTAAATAAGCGTTTGGGCTGATTTGAGCGGTCTTTTGGAGCGTTATCGCGGTTG TTTATCCGTTTATGCCATGTTGGTGTCCTCCCAAGAGACTTATTTTGAAGCGGACGACCGA	288	FCCTGTCARVYALLDLNLESFYDKLND STLAPVTPQDSMSALELEQALEENKNG DFILNLLLEKTHCNACLWLNQKVLRLS GVKKVSVNFTTHHLQVFEKSLNPKEII QKIESLGYGAKIYNAQNYTLKAQKEQR SYLLTSLVGGFFATMNLMFIAIKYASYG GASYGGANYGAGMDKLMQORNLDLVS LFLSLVLVWVGRFFIKGAFYGLKNGVL GMDLSVSFGALSFAFVSVYAMLVSQE TYFEASST

HP0714	295	CCAAGAAATTTTAAACAAAAAAGCTTATCGTAGATGCGCTGACCTAAGAAATTAGAAGAACAAAAAAGCTCT AGAAAAAGAAAAAGAAAGCTAAAGAACAAAGCGCAAAAGCACAAAGATAAAAGAGAAAAAGAAAGAGCGTG CAAAAAATAGAGCCAAATTTAGAAATCTCACTAACCGCTATGAGTAACCCACAAAATTTGAGCAATAACAAAAATCTTAG CGAATTTATCAAGCAACAAAGAGAAATGAATTAAGACCAATGAACGACTAGAGGACATGCAAGAACAGGCTCAAG CTAATGCGCTCAACAAATTAAGAACTCAACAAAGAAAGCTGAAGAGACAAATCAAGCAAGAACAGGCTCAAGATAA ATCAATATTAAGACAGATAAGCTCAAAAAAGCCCTGAGGATACTCCATAGAAATATCTCTAGCGATAGCGCTTGG AGAACTAATCTTGTGCGGACTAATAAGCCCTGTATCAATTCATTTGAGAAATAGCTCAAAAGACAAATTTTGCTT CAGCGTATCTAACAGTCAATTAAGATACCCCAAGACACGAACTCTAGCGTTATTGAAGAGGAGTTAAAGAAAG GAGAAAGCAAGAGGAGCAAGAAATGATTGAAGCAAGAAATCTTAACACACAGCTACATCAATAGAGTGATG ATGGCGAGCAATGAACAGATTATCAACAAAGAAAGAAATGAAGAGAAAGCAAAATATCTTAGATCAAGCAAG GCGCTAGAGACTCAATATGTGCATAATGCCCTTAAAGAAAGCAAGCCGCTAGAACTACAACTACTACCAAGCGCC TGAAAAAGCGCTCAACATATTATGCCCTCTGAATTT	296	QEFLTKKLIVDAPDPKELEEOKKALEK EKEAKEQAQKAQKDKREKRKEERAKN RANLENLTNAMSNPQNLNNKLNSEFI KQRENELDMERLEDMQEQQAQANA LKQIEELNKKQAEETIKORAKDKINIKTD KPQKSPEDNSIELSPSDSAWRTNLVVR TNKALYQFILRIAQKDNFASAYLTVKLE YPQRHEVSSVIEEELKKREEAKRQKELI KQENLNTTAYINRVMMASNEQIINKELI REEKQKILDDQAKALETQYVHNALKRN PVPRNYNYQAPEKRSKHIMPSEI
HP0714	297	TGCCCGGAGCTAACGCGCTCACTACGCGTTCGCGGAGCGGGTTTTAGAGGGGGTTTTTATGCTGGCTT TTTACCCCATAAAGCAAGGAGGCGCTTAAATCGCTAAATTTTAAACGCTTATGCGTATTTGGAAGAAAAAAC CCCGGTGTTTTTATGAAGCCCGCACCGATTGTGGAGACTTAAAGGATTTAAACGATCTGGCTAAAGGCTGCT ATTTGTTGCGGCTAAAGAGCTTACCAACTCCACCAACATATTATTAGGAGAGGTTCTCAATCATAGAGCGGT TGCAACAAAGCACTATCCAAAGGGAGTGGTTTTAGTGTCTTGAATGAGAAAGAAATAGAGCCTTGCATGGGCTA TCGGCGTTATTGGAGTTGGATTACCTCCCTAAATTAAGGCTAAATTAAGCCGTTATGACACAAAAAACGCTAAA GAGCTTTATTCCAGCGTTTGTAGAGAAAGAAATCAATAAAGGGGTTAGCATGCAAGCAGTAATTTATGCGAAG CAAGTGATTATGCACCTTCAACTCTCATCAAGAAAGAAATGCAAGAAATCTATCTTCTAAAGAAATAGACAGAAAC TTTTTTTCGGCTCAAAAGAGCATGCCCTAATATCATCAAGTGATAATAAAAGCGCAAGCTTGGCTAAGGGGG GGAATCATCAAGGGGTTTTGGCTAAGGTGAAGTGGCTTACCCCTAGCGGTTTTCTTTAAAGAGGTTAAAAAAGCTCAAAAA CTTTGG	298	PGANALTTAFCSGFLGRRFFYAGFLP HKSERRLKIKNALAYLEEKTPVVF YESPHRLLETLKDLNDLAKGMHLFAAK ELTKLHQYLYLGEVSIQIERLQSTIQG EWVLVLLNEKKIEPCMGSLALLELDLPP KIKAKIEAVMTQKNAKELYFQRLLEKN Q
HP0714	299	GGAGAAATCGCTTAAAGGATAGCGGCTATTAAAGAAAGAAATTAAGAGGCTAAAGATTGATTGATGCGCTAAA TTTGAGAAAGCCACGATTATAAATCGGCTGATGCTTTAGAGTATCAATACGATTTTTTAAAGGTAAGGAATTA CGCCCTTTAAAGCTATTAGATTAGCCAAATGAGTTAACCACCTGTAGACGATTTCAAGGCGCATTTCTAATAAAT ATTTGGCATGCGAAAGGGGGTTTTCCCATTAAGCATTTCTTTAGCATCGCTTAGACAAATAGCGAGACTTCAAAAC GCTGTGATTAAAGACTATCTTTAGAAATGATCAAAACGAGACAAAAAGAGCCTTTGAGCGACGCTAAGATTTTA GAACTCATTGAAGAAATTCATTTGAAATGGTAAGAGAACGATCAACCAATACCGCAACTGCTCAACATCGCC TCTTCAAGCGAAAGGAAAGGCTCTATTGATGCGCGCTTGAAACCATGATTTTAGGGCTTATTCTTATTGAGTATC ATTTGTCCTTGATGCGGTGAGTTCAAACTCTTGGGATACCTTGGGAGTTGGTATAAGCTTTCTGATTGACAGTG TCTAAAGCCTTAATGTGAGCCTCTTTTGTCTTTGGTGATCACAAATGGTATTAGTTTGTCTTAAACGCTATAAA AGATTAGCATCT	300	EENRFKDSGYLKEKLKEAKDLIDALNL RKATYKIGLMLLEYQYOFFKGKELRPL KLLDLANEFNHSVSTISRAISNKYLACE RGVFPKIHFFSIALDNSETSNVAVIKDYLL ELIKNEDKKEPLSDAKILELIEEKFLMKM VRRITTKYRQLLNIASSSERKRLYLMRA
HP0714	301	AGACTTGGATAAGGCTTGAATGATAAGAGCTAAAAATAAAGCGATTTTGAATTAGAGGAAGAAATTAGCCCT AAAATTACAAGTTTCTAAAAAGGAAAGCAACCCCTACAGACAGCAACACTAAATCGCTAGCATTTCAAAAGAAATGAG CGAGATCAATCCGAAAGGGAATTCGATCTTTAAACATTGAAGAGATATTGCTAAGAGCGGATCCAATCAAGCCA ACAGAGAAATTTGAAACTTGCAAAATGAAATCAAGCACAAGCGGAAACCAAGAGGATTTGAAAAAGAAATGCTAG AGCTTGAAGAAATTAGTGACGAATTTGAAAGCTTAGTGAAATGAAGTCAAAACATCAAGAAACCCCAACAAATCA TCTTTAAAGAAAGAAAGAACTCGTGGAAGAAACCGAGCTTAAATCTATAGCTTTTATGAAAGGATCAGAAAGTGGG CGAAACACGAGCATTTGTAACGATCAAAAAACAGGCTTGTGGGGGTTGTTTATTCCGTTGAATGATAAGATTATA CCGAAAGTCTAACGAGTGGG	302	DLDKALNDKEAKNKAILNLEEKLALKL QVSKNEQTLQDNTNTKIASIQKMKSEIKS ERELRSLNIEEDIAKERSNQANREIENL QNEIKHKSEKQEDLKKEMLELEKLVQO LESLSVENEVKNIKETQIIFKKKEELVEK TEPKIYSFYERIRRWAKNTSIVTIKKQA CGGCFIRLNDKIYEVLTSG

[illegible]

HP0428	313	AATCAGCATTTCTGAGATCATGACTAAAGCGATTGAAGGCTTGCTCTCTAATTTGGACGCGCATTCAGCGTATTTGAA TGAAAGAAGTTTAAAGAAATTTCAAGCCCAACCGAGGCGCAATTTGGGGCTTGGGATCACGGTGGCGATGCGG GATGGCGTTTAAACCGTTATTGCCCTTTAGAGGCACTCCAGCTTACAAAGGCTGGGTTAAGTCAGGCGATAACAT TTTAAATCAATAACGAAAGCAGCTGAGCATGAGCATGATGATGCGATCAACCTCATGCGGCAAGCCAAAA CCCCTATTAGATCACCGTTGTAAAGAAACGAGCCAAACCTTTAGTGTAAACATCATTAGAGACATCATTAACCT CCCCTCTGCTATGTGAAGGATTAAAGAAACCCCTTATCTGTATGTGAGAGTGAGTGGTTTGAAGGCAATCCTGGAG CAATCGGTTTGAAGGCTTAAAGCTAACCCCTAAGGCTAAGGCGATGCTGTTGATTTAAGGCGCAATCCTGGAG GGCTATTAAACCAAGCGGTGGCTTGTCTAACCTCTTCAATTAAGAGGGGTTTAGTCTCTCAAAAGGCAAAATA AAGAAGAAATTTAGAAATACAGGCTAACGGCTACGGGCGACTGCAAGATCAAAACGGGCGTGATTATCGTGAA GGTTCAGCGAGCGGAGGATCGTCGAGGCGACTGCAAGATCAAAACGGGCGTGATTATCGTGAA ACCTTTGGTAAGGAGCGTGCAGATGCTGCTCCCTGTCAATAAAGACGAAGCCATTAAATCAACCGCACGCTA CTATTTGCCGAGCGGCTACCATCAAGCTAAGGCGATCACGCTGATTTATCGGTTATCCGGTAAAGTGCCAG AAATGAAACAAATTCAGCTTGAAAGAAAGCGGATCTAAACACCATTTAGAGCAAGAGCTTAAAGAGATTGATGATA AAACCCCAATTCAAAGAG	314	ISISEIMTKAIEGLLSNLDASHAYLNEKK FKEFQAQTEGEFGLGITVGMRDGVL TVIAPLEGTPAYKAGVKSGDNILKINNE STLSMSIDDAINLMRGKPKPTQITVVR KNEPKPLVFNIRDIILKPSVYVKKIKETP YLVRVSGFDKNVTKSVLEGLKANPKA KGIVDLRGNPGGLLNQAVGLSNLFKE GVLVSQKGNKEENLEYKANGRAPYT NLPIAVLVNGGSASEIVAGALQDHK RAVIIGEKTFGKGSVQMLLPVNKDEAIK ITTARYYLPSGRTIQAAGITPDIVYPGK VPENENKFSLEADLKHLEQELKKID DKTPNSKEADKDKNEEKEITPKMIN DDIQLKTAIDSLKTWSIVDEKMDKAPK KK
HP0428	315	CTAGCACTTCTAAAAAGAGAGCGGATAAGGGATTAAAAAGGTGTTCAAGACAGCAAAAAAGACGCTTGGGGTTC ATCTATGAGATCAGCGAGTTTCATGAAGCCTATACCGCATTTGCTAAAAAACAAGACCGATACGCTCTATTATTGAGG TATCTCCCTCTAGGTATTGGCCAGCATTTAACGACTGCCCTTATGTCAATAACCTGATTTGACGCTTTGAAA AAGCTTTGGTGCTTATTATTACCAACTTGATTGCGAGGCGCATCAGCGCATCAAGCAACCAAGTATCAA CATTATCAAAACGTTAAAGCAATAAGAGCGTTGAAACCATCAAGAGCTTATATTGAATAGCATCGACTCTTATAAC ACCTTTGATCAATACCTCTATAACTTATGGGATAGCTCTCTGTTTATCATAGCAATGGTGCTGCTTAGCC CTAGCTAATTATTTCATGGCAGATGAAGAGAAACCCCATTTTATCGCTATGATGCGGAAACCAAGTGAGCATATT TTGCCACAAACGCCCAAGAGGCGAGTCAATGGAACGCGGATTTTGACAAAGAAAGAGAAAGTGGTAAATAA TATCGCGAATTTAACCTTTTAAAGCGTAAAGAAACGCGCATGCTTTAAACGGGATTTGATGAAAGAAAGAAAT TTATGGAGGCAAGACAGCAAGTATTAGCTGTTATGACATCACTAAAGAAATTTGATGAAAGAAAGAAAT GAATGAGAGTCCCTCCAGAGCGGATCAAAATCTTTGTATAACACTATCACGCTGTTTACACATAGAGGGCAAG AAGATGATTTTGAAGATGATTTGATCTAGATGATTAAAGATTGCCAAGCATCAAAACAAAGAGGTTGATCAATG CCTAAAAAGAGCTATTAAAGATGTCAAGAAAGGATTTTAAAGACTTCTTAAAGAGCAAGCAACAGCACCGCCCT ATTGTTCTATA	316	STSKKRADKGLKKVFKDSKDKACGFIY EISEFMKAYTALLKKQDRYVYLLRYLPS RYWASILTALYVKYPDFDALKKLLVSY YYQTWAGGTITRIKQTSINIHKVKSNIK SVETIKELINSIDSYNTFDQYLYNLWD SSSVYHSHWVRPVLALANYFMADEEK PHFIAMDAETQVEHILPQTPKRGSQWN ADFÖKEKREEWVNNIANLTLLKRKKNA HALNGDFÖDEKRKIYGGKDTSKVISCYDI TKELYSNYRKWNEKSLQERYKSLYNTI TPVLHIEGQEDDFEDDFLE
HP1518	317	TCACCTACATGAGCGGATAGCTTGAATATCGCTAAAGAGGCTTTAGAAAGCGGAGGAATAAGATTTAAAGACT ATGGCAAGACTATTTACCCCTAAAGCCAAAGTCTATTCAGCAAGAAATAAAACGCCCAAGAGCCCATGAAGCG ATCAGGCCCACTTCTATTATTAGAGCCAAACGCTTTAAAGACTACCTTAAGCCTGAAGAAATTAAGGCTCTATAC TTAATTTACAAACGCTTTTAGCTTCTCAATGCAAGACGCTCTTTTGAAGCCAAAGCGTGTGTGGCTTGGCAA AAAGGCGAGTTTAAAGCGAGTGGGAGAAAGCTCTTTTGTGGCTATTATAAAATTTTAGGCAATGACGATAAGGA CAAAATGCTCCCAATTTGAAAGAAATGACCCCATTAATAGAAACTAGAGCAACGCCCATGTTACAGAACCC TCCAGCACGCTATTCTGAAGCGAGCTTGATTAAAGTTTAGAAAGTTTAGGATAGGCGGCCAGCACCTACGCC CAACGATTTCCCTTTACAAACAGAGACTACATCAAGGTAGAAAAAGCAAAATCAGTCTTTAGAGAGCGCTTTTA AGGTGATAGAAATTTAGAAAGCAATTTGAAAGAAATCGTGATTTCCAAATTCAGCGCTTCTTAGAAGAAATGG ACAATATCGCTCAAAATAAGCCGACTACAGCAAGTCTTAAAGGACTTTTACTACCCCTTTATGGATAAAATGAAG CTGGGAAAGAAATATCATCTCTCAAAAGTGATGAAAAACCGGTCAATCATGCGCTAAATGCGGTGGGGAATTA GTCAAAAAAATAGCCGTTATGGGAGTTTATCGCTTGCAACAATACCTAAATGCAAAATATGTCAAAACAACTGAA AGCGCTAATGATGAAGCCGATCAAGAAATTTGCGGAAATGCGGAGGGGAAATGGTGCAAAATTCAGCAGAAACG GGCGGTTTTAGCTTG	318	TYMRTDSLNIKAELEEARNKILKDYGK DYLPPKAKVYSSKNKNAQEAHEAIRPT SIILEPNALKDYLKPEELRLYTLIYKRFL ASQMÖDALFESQSVVACEKGEFKAS GRKLLFDGYKILGNDÖDKLLPNLKE NDPIKLEKLESHAHVTEPPARYSEASLI KVLESLGIGRPSTYAPTISLLQNRDYIK VEKKÖSALESFAFKVIEILEKHFEEIVDS KFSASLEEELDNIAQNKAQYQÖVLKDF YYPFMDKIEAGKKNISQKVHEKTGQS CPKCGGELVKKNRYGEFIACNNYPK CKYVKQTESANDEADQELCEKCGGEM VQKFSRNGAFLACNNYPECKNTKSLK NTPNAKETIEGVKCEPCGGDIALKRSK KGSFYGCNNYPKCNFLSNHPIKPKRC EKCHYLMSEIRIYRKKKAHECICKERV FLEEDNG

HP1518	319	GAATGGGTGGAGATTGAGGTTGGAGCATTTGGATAAGTGATTATTAGATCAAGCCCCCATAGGCAAAACCC CACGAAGCAACCTGCCACTTACACGGGAGTGATGAATCAGGATTTATTGCGGAGCAAAAGAGCTAA ATTTAGGCTATAGTCGAGCGCTTTAGCTTTAATGTTAAAGGAGGCGGTGCGAGAAATGCCAAGCGATGGG ACATTAAATAGAAATGCATTTTGGCTGATGTAGTCAATCGGATAGCTGTAAGGGCGCTAAATACAAACCC AACTTTAGAAATCAAGGTGAAGGCAATCCATTGCCGATGTTGAACATGAGCGTGGAAGGCTTATGAATTT TTGCTAAATCCCTAAATCGCCGTGAAGTTAAACGCTTATGGATGGCTTAGGCTATATCACTTTAGGCAAA ACGCTACGACTTTAAGTGGGGGAGGCTCAAGGATCAAAATAGCTAAAGAAATGAGTAAAGAACACAGGCAAA ACCTTTATATTTAGATGAGCCTACTACCGGTTTGCAATTTGAAGACGTGAATCATCTTTACAAGCTTTCATT TAGTGGCGTTAGGCAATCTATGCTAGTGATGAGCATAAATTAGACATATCAAAACGCTGACTACATTATAGACAT GGGCGCTGATGGGGGATAAGGGCGGGAAGTCATTGCGAGCGGCACGCTTTAGAGGTGGCGCAAAATTTGCG AAAAACCCAAAGC	320	NGVEIVGLEHLDKVIYLDQAPIGKTPRS NPATYTGVMDEIRILFAEQKEAKILGYS ASRFSFNVKGRCEKCGGDIKEM HFLPDVLVQCDSCCKGAKYNPQTLEIKV KGKSIADVLNMSVEEAYEFFAKFPKIAV KLKTLMDVGLGYITLGNQATTLGSGEA QRIKAKELSKDGTGKTLYLDEPTTGL HFEDVNHLQLVLSLVALGNSMLVIEH NLDIKNADYIIMGPDGDKGKGVAS GTPLEVAQNCEKTS
HP1518	321	CCAATAACGATATAGTGTGTTGAAGCGCACCCAAAAATTTGGAATTAGCTAAGTATTGCTGTGAAAATAGCGTCC ATTTAGCGTGATCTTTTATCGCACAAAGATAGAAACGGACACCTTTTTTATTCAACGCTTCAACCTCTCTATTGT ATTTTAAAGGATTAAGCAAGCCATACTCGCCCAACACACGCCACGAATTACTTTGATAGTAGCAAAATCTTATTTT TTATGGATTTAAACGATACAGAGTTGTGGAAATTTGCGCTAAAGTCAGATTGATGGGTTATTTCTAAAGATTAC TCCTTTTAAATAAGCCATTTTAAACAAATCTTAGTTATAATAAGCCCTTTTTTAAAGGGAGATGTCGAGTGGTTGA AGGAGCACGCTGGAACGCGTGAAGGTGCAAGCCTTCGAGGTTTCAATCCCTCTCTCGGCAATTTTAAATAATG CCACGAATGCGAAACAAAAAAGCTCTTTCAACAAACTGCGCCTTCAGGAGTTAGAAA	322	NNDIVCFEAHPKNLELAKYCCENSVHF SVIFLSHKIETDTFFLFNAFKPLYCIFKDI KQAILAQQAHTNYLLDSKILFFMDLNDT ELWEICAKSQIDGVISKDSILLK
HP1518	323	CACTTTTCAAGAGCTGTGAGCGTGTATTACGGCATGTTGTTAAACGCAGAGTGCTGAACTTTAGAGAGGTGG AAAAAGGCCATTATAAGCATTTCCAAACGCTTTGAAAATGCAAAAAGTGGGCAAAATCGCTAGGTAGAAACCTTA GGCGCTCAAGTGCTTATGATAAGGCCATATCGCTAGCTAAGGCTAAGACGTTGTTAGAAGTTTCGAGCTCTC GTTCAATCCATTTTATCTAGCAAGGACGATTTAGTGCTTCAAGCAATAGAGATCCGACGGAGAAAATCTGCC CGATCTGAGCTTTTTGTTCTCCACGCTCAATCTTACCCGTTTAAAGACTTTAGAAAATCAGATTCAAAATCTCT AAAGAAAACACGAAATACAGATCGCTAAATCTTGCCCAAGTGAGTTTTTGGCTCTTATATTATGAAGCAAAACA ATTCGGTGTGTTGAAGACATGATCCCTAGTTGTTGTGGCGTGGCGGCGCATGCCATTCTTCTCCACAGG GCGCATTCAAAAATACCAAGCGAGCAAAATAGCGGAGTTGCAAGTAGCGAAACAAATCCAGGCTAAACAAAAACA TGGAAATTATTAGTAAGACTTATAAGAGACGCTTTCTATTGAAAGATACAAAGCTTGCTTTCTAGCGTGGA ATTAGCCAAAGGAAACTTAAACCTCAAGAGACGCTTTTACAGGCTTAAGCACGAACGCTCAAGTCATTGATGC GAGGAACACGCTTCTCTATCGTCTGAGCAAAAGCGTGCTTATAAATACATCGTTTCATTAGCGAAATTTAAT GGCGTTAAGCGATCATATTGATTTATTATGAATTTGTTTAAAGGAAATAATCATGTCAAATAGCATGTTGGATA AAATAAGCGATTCTTACAGGGGTGGGCTTTATTATTAGGCTAATCGTCTTTTATTATTAGCTTATCGCCCTA AGGCTGAAGTGT	324	TFQELVSVYYGMVLNAEVAETLEEVEK GHYKHQNALKMQKVQGIARVETLGA QVAYDKAHIASVKAKDVLEVSQLSFNSI LSSKDDLVPSSKLEIRTEKILPDLFFV SSTLNSYPVLKLTLENQIQISKENTKLOIA KFLPQVFFGSYIMKQNNVSVFEDMIPS WFGVAGRMPILSPTGRIQKYQASKLA ELQVSSEIQIAKKNMELLVINKTYKETL SYLKEYKSLSSVELAKENLKLQEQAFL QGLSTNAQVIDARNTLSSIVVEQKSA YKYIVSLANLMALSDHIDLIFYEFVY
HP0547	325	TGGAAATTAGCTTTGATCGCTCTGTTTATGGCTCTTGTGGTATTAGCGTTGGCGTGTAGCTGCGATCAACGCT ATAGCGTGTGTTGATTATCCAGCATGACTTTTGCCTTAGCCGGATTCTATGCCGTTTGGCTAGGCTCATGC TGATTTATATCTTAGCGTGCAATTGGGTGTTGCCGTTTGGCGTTTGGCGATGTGTTATTATTAGATGGCC CCACAGGCTTTTATTGATAGACAGCCTGATCGCAAGGATTATGGCGTTTATGGATACGATCAAGCATTGATT TTGCCATGATTGTAGCCACGTTTCTACCGCTGTTATGCCAATGACTCGCGGAGCATGGCAGAAAGTGTG TAAAGAAGATTATGTGCGTACCGCTAAAGCTAAGGGGTAGCTCTTTAGGGTATTGTCACACTTTGCGTAA TGCTTTAATCCCTGTAACGACTATCGAGGCTTGTGTTGCGCGGCTTTAGGGGGAGCATGATAACTGAAACG GTTTCTCATGGCTGGGATTGTAAGTGAGTTGTTAATGCGCTCAACAGCGGATTTCCCGATTATCCAGTCCAT GCTTTGATTATGCCATGATGATATTGGGCTAATCTTATGATGATAATTTATACGCTTTTATGATCCTAGATAA GGTTGTCATAATGGAGCTTTTAGAGAGTTTATCCAACTTCAAAATAAAGGCGCGGCTGTTGGGCTTGGAT TGTCCTTTTATTGGTAATTTGCGGATTTTTCGCCCTTTTAGCCCGCATGATCCTTATGTCAAAACGCGCAAGA TCGCCCTTTGAAGCCTATATGGAGCATGGAGGAATGCTAAATACCTTTTAGCCACCGCATGATTTGGGCGCGATA TTTTGAGCGCTGATCTATGGGCGCAGGATTCTTTAACCATAGGATGTTTCTATGGGA	326	ELALIALFMALVLGISVGVLAALKRYSVF DYSSMTFALAGISMPVFWLGLMLIYIFS VQLGWLVPVGRLSVYVYLDGPTGLYLI DSLARDYGAFMDTIKHLIIPSVLATVS TAVIARMTRASMAEVSKEDYVRTAKAK GCSSFRVIFVHTLRNALIPVTTIAGLMLA GLLGGSMITETVFSWPVGIGKWIIVNALN QRDFPIQMSLIAMMYIGIANLLVDILY AFIDPRIELS

HP0547	327	ATACAAATATCAATGCGATGAATGCGCATGTGCAATCGCACTCGGCACTCACTCAAAACGCGCTTAAACCTCATTTGGAGCGGAT TGAGTTCAAGTTTAAAGGATTAAAGCGGCTGATGACGCATCAGGCATGACGGTGGCGGATTCTTTGCGTTACAA GCGAGCAGTTTGGTCAAGCGATTGCCAACACGAATGACGCATGGGATTATCCAGGTTGCGGATAAGGCTATGG ATGAGCAGTTAAATCTTAGACACCGTTAAGGTTAAAGCGACTCAAGCGCTCAAGATGGCAAACTACAGAACTCT CGTAAAGCGATTCAATCTGACATCGTTCTGTTGATTCAAGGTTAGACAATATCGGTAATACGACTACTTATAACGGG CAAGCGTTATTGCTGCTGATCAATCACCAACAAAGAAATCCAAAGTAGGGCTTATTAACCAAGCATTAAAGCTTCT ATCGGCTTACCACTTCCGATAAATCGGTGAGTTCGATCGCTACAGGTGCTTAATCACCGCTTCTAGTTACGAGGCAC TAGCTTGACTTTTAAACAAGTGGATGCGTGAATGATGTAACCTTAAAGGCTTAAAGCTTATAGTTACGAGGCAC AGGATTGGCGTTAGCAGAGTGAATTAACAAGAGTTCAGCAAGCTTAAAGCTTAAAGCTTATAGTTACGAGGCAC CCACGAGCGATGTGGGTCAGTCAGGAAGTTTGAAGTAAATTAACCTTAAAGGCTTAAAGCTTATAGTTACGAGGCAC GATATTAGAAACGACTCAGACGAGGATGATGCGAGGATCAATGCGGTTACTTCAAGAACCGGCTGGAAG CTTATACGGATCAAAAGGCGCTTGAATTTGCGCAGTATAGTGGTGGGATTGAATCAAAACCGATAGTGTCTC AGTAATGGCCTAGTGTCTTAAACGATGGTTAATGGCGGTGAGGATTAAACAAAGGCTCTACTAACTACGGAAGGCT TTCTCTCACACGCTTAGACGC	328	TNINAMNAHVQSALTQNALKTSLERLS SGLRINKAADDASGMTVADSLRSQAS SLGQAIANTNDGMGIQVADKAMDEQL KILDTVKVKATQAAQDGTTERKAIQ SDIVRLIQGLDNIGNNTTYNGQALLSGQ FTNKEFQVAYSNSQSIKASIGSTTSKI GVRIATGALITASGDISTLTKQVDGVN DVTLESVKVSSAGTIGVLAEVINKNS NRTGVKAYASVITTSVAVQSGSLNL TLNGIHLGNIAIDIKKNDSDGRLVAANA VTSETGVEAYTDQKGRNLRSIDGRGI EIKTDSVSNGPSALTMVNGGQDLTKG STNYGRSLTRLDAKSNVVSASDSQH LGTAIGFGEQVAETTVNLRDVTGNF NANVKSAGSANYNAVIASGNQSLGSG VTTLRGAMVVIDIAESAMKMLDKVRS LGSVQNMISTVNNISITQVNVKAAES QIRDVDFAEESANFNKNINLAQSGSYA MSQANTVQQNILLT
HP0547	329	TTTAATGCACAAAGCGTTATGGGATTTCATTTTATAGGTTATGTTATCATTTTTCCTTGAGCTTTTAAATAGGGG GGGAGTGCACAAAGCGCTTGAACAGGTTTAAATTTTAAAGCGATGCGCATCAAGAAATGTGGCTAATGAAGAT TTAGCGTCTTTGGTGGCGATGGCATTATTGGGGAGTGGGAGCGGCTTTCATTTCCCTTAAATGTGGTGT GTATTTGGGATTCTTACTAGACGACGAGGCTATAGTAGGAGGTTTGTAGATGGATCTTGCTATAA ATTTGGCTTACATGGGAGAGTTTATCCCTTAAATCACCGGTTTGGCTGCTCAGTCCCGCTTACATGGCGACAA GAACCTTACAAACTATAACGAACGACTGATCACGCTTTTGTGATCGGTTTATGAGCTGCTCGGCAAGGCTGCT ATTTATGCTGTTGTAGGCTGTTTTT	330	LMHKRYGIFLGFMFIFLSLFLIGGV QKALETGFKFLSDGIKENVANEDLASL VGDIGGVGATVSLPLJWL YFGISLL ETTGYSRVAFLDGLHFKFGLHGSFI PLITGFGCSVPAYMATRTLQNYNERLIT LFVIGFMSCSARLPYVLFVGSF
HP0547	331	CCTAAATAATCGCCGCTTTAGAAAATACGCTGAAGTAAACAGGAGAGCTTATGATGCTGCGCTAATGAGCACAA TCAAGGTTATTTGGAAGTCAAAAGCTCAAAATGGGCTTATTTGTAATATGAGTGTCTTAAAGAGGTTTAA AAATATTAAATCATGCTTTAAAGATTAAATAGGTAATGATGAGTGAAGTGGATTTTGGACCCATAAAA GAAGAAAATTTTTCATCAAGCGAATGATTGAAGGAATTAAGAGCGATTTTACAGAAAAGAGGCTTAAAGAG TGGTTGGGCTTGGCGGATAGCCCTTAAATGATCATTTAATAGACAATTTAAACACGCTTAAAGATGGCGATGTA ATAAGTTTGTGCCACCGGTTTGTGGGCTAGGTGTTAAATCATTTCAAGGGCATTAGATACTAGGGAGCTTTT AAAAGCCTACCAAGGAAGC	332	PKKIAALEKYAEVTRESLIVCANEHQNG YLEVKLKMGHLL
HP0662	333	CGCCTAATAGCTCTTATACACGCTAGAAAAGCTTTGGGTTATCTTTAAAGACAAGCGTTTATGGAGCAAGCCT TAACGCACAATCATGCAAGCTCGCTTTAAACAATGAGCGCTTGAATTTTAGCGGATGCGGTGTTGGTTGGTG ATAGGGAGTTGCTATACCAATCTACCAATACGATGAGGAAACTCTCTAAATTAAGGCTTCTATTGTGAGC GCGCATGGTTTACTAAATTAGCGAAAGCGATCGCTTACAAGATTATTTGCGGCTTCTCTCTGAAGAAATTTCTA ACGGAGAGAAAACCTCTATTATCAAGCGCTTTAGGCTTTAATGGCTGGGTGTTATTAAGACGGGGTTA GCTAAGGTGCAAAAATCATGCAAAATTTACTCAATCGCGCTTACAAGCTTTGATTTAGAGCAATTTGTTATGGAC TATAAACCGCTTTACAGGAATTAACCAAGCGCAATTTGCGGTATCCCACTTACCAATTTGCTCAAGAAAAGGGG CCAGACCATCAAAAGAAATTTGAAATGCTCTATACATTAAGATAAAATGTATGCGACCGCTAAAGGCAAAAGCAAA AAAGAGCCGCAACAGCAATGCGCTTATCAAGCGCTTCAAAAACG	334	PNSSYTTLEKALGYSFCKRLLEQALT HKCKLALNNERLEFLGDAVLGLVIGEL LYHKFYQYDEGKLSKLRAIVSAHGFT KLAKAIALQDYLVRVSSSEESINGREKPS ILSSAFEALMAGVYLEAGLAKVQKIMQ NLLNRAYKRLDLEHLMFYMDYKTALQELT QAQFCVIPTYQLLKEKGPDIHKEFEMA LYIQDKMYATAGKSKKEAEQCCAYQ ALQKL

HP0662	335	TTATAAGGCTGGGATTTTGGCACTCTTTTGGCTGGCAGGGTGGGGTATTTCTTGATCAAGGCACGATTGATC CTAAAGGGGGGATTATACGCTATGGCCCTTTATTTGGCTGAGCAATCAGATGTTAGCGGCATGGCGTTGTGTTG GTCACGGTGTGTTTAAATGGGGCTTTTAAAGGGGGCGGATGATAAGCCCTTACCGGCAGTTTGTATTTATC CATCACTTTTATAGCGGATTTTAAAGGTGGTGCCAAAGAGCGATACAGCGTGTCTGAATAATGTTTCCCATGTGGC GCAATGCAAAATCATCAAGAAATAATGGCTACCACTACCGATGAAAAGCGCTCAAAACGCTCCAAAATCCTTTT TAACCACGCTATTGATGCGATTTTGTGCGTGTTTTTCATGCTTGTGGCGCTATTGGTTTTAATCGTGAGCGTTAGGAT TTGCTCAAACGCTTATTTTAAACAAATAATTTACCCACCGCTGGCTGAACCGCTACATCAAGCCCTCTTGAATAAA AAAGGGTTTTAACCCCTTTAAATCCATAGAAAAGTTTGACCCCTGTTTGTGAAGCGTGCAAACTAAAGATGCT TGGGGTTTCTGCTGGGTTTTTAAAGGCTATCGCTTGATTTTTTAAAGGCTCAATTTTAAAGATGATTTAAAGATGAT GGGATTTTGTAGTGGGTATGATTTAAAAAAGGGCTTTTGTGAAAAGAAATTTTATATATAAGACTAGAGAAAACA GCATCAAAAAGACGCC	336	YKAGIFATLLCVAGWGYFLYQGTDIPK GGIYTLWPLFGVSNQMLAGWALLLVTV VLFKMGRFKGAMISALPAVLILSITFYS GILKVVPKSDNSVLNNVSHVAQMQUIKE KMATTTDEKALKTLQKSFFNIHAIDAILC VFFMLVALLVLIVSVRICSNAYFKNKIYP PLAETPIYKAS
HP0661	337	CAGCGTTTTTAATTGATGCGGATAATGTGCGTTATGAGAGCGAAAAGCCCTGTGTGTTATTTACGCCCTAACTATG GGGCTTTAGAGATTAGCCAAACCTCTAAAATAGCGATACAAACCAATTACAAACCATGCTTAGCGATACCTTTTCTT TTGCTATCATAACTTATGAACCTTTTAAATATGTTTATGCTTTCATCCTTTTATGATGGGAATAAGGCAGATGATAGTAGAAAATTT TATAGAAATTGCCCTGGATTGAAGATAGAAAGGATGATAGCAATCGTCTTTGTGGCTTACTGCCCTTTTCTTAAACAAG GGATTTAAAAAATTTATAGCGTAATGCTTTGAAGAAGGCAAAAAGATCCTTTGAAACGCCCTACTATGCCCTTATTT ATAGAGAGCTTAGAAAAGCTAGCTTGCAAGTGTAGAAATGTGAAAATTTGTTCAATGACTTATTATGATAGAGATTATA ATAGAGAATGTGAGATTTGCCCTTATTGCCGATGCTAAAAAACCTGTCAAGACTTGTAGCAACAAGTTATTACCAAAAAGA CGCAAGTTTTTTTATT	338	AFLIDADNVRYESEKALCVIITPNYGAL EISQTSKNSDTTNTNYNTMLSDTFSFAIT YELLMVHPFDGNKADDSVENFIELPW IEDRKDDSNRSCGILLPFFLTRDLKNLLA
HP0661	339	AACAGCTTTACAGAAAATCGCTTGATATTGCCAGAGCCCAAGATTGAATCTTCAAAGGCTAGTTGGATGCGGCCAAT CTTCTTTTGCCAAATTAAGAGGAAATACGACGCTAATTTAGTGATTCCACCCTATTTAAGGGCTTAACACAG CGCTTTGATCGGGAAGTGGCTTACAATTTAGCGCTCAATAATTATGAAGTGCAAAAAGCCCAATTACATTTTCAACACAG GGGCATAAATAGACGACTATGTGCATTAGGGAATGAAAA	340	QLYRKSLDIARAKIESSKASLDAANLSF ANIKRKYDANLVDFTTYLRGLTTRFDA EVAYNLALNNYEVQKANYIFNSGHKID DYVH
HP0661	341	CCCCTTGGGCTAATGGCAGCATCCCTAAATCTAACAGCACGGTGGCTTTTGGGGGTATGAGGGAGTCAATTGGGG GAAAACGGGCTATATTACTGGCACTTCACAGCCGATAGGGTTTATATCACCGTAACATGATGACTGGTAACGGCG CTCAAAACCGGTGGGGGGGACTTTGAATTTGTGGCGGAGCTGAAATTAATATATCGCTGGAGCCACTTTTAAAAAAC CTAAAACCACTTCACAAAACCTTACATGACTTTTATGGCATTAGGGGATAGCTCTGGGAGCGCTAAGATCAATGTT TCTCAATCTGATTTTACGATTGGACGGTGGGGGTATGATTTACGGGTAAATGGCTTTTGATAGCGTGAATTC AACAGGCTTATTACAAATTTCAAGGCACTGAAAATCTTACAATTTTAAAAAACACGAACCTTTTATGACGGGAATTTTA AGTTTCAGGGCAAGACCACCATTTGAAAATCCGTTTTAAGCGACGCTTCTTACACTTTTATGATGGCACGAATAACACCT TTACTGAAGACAAGTTAATAATGGCTCGTTAATTTTATGTCATGCAGAGCAGACAGCGCTTTTAAATCAACACTCGTT TAATGGCGTTCGTTAGTTTAAACGCCAAGCAAGTAAATTTTATGTTAGTGGGAACCTCGTTCAATGGGGCGTGTAAATTT CAATAATACCCCTAAAGTCAGTTTCACTGATGACACTTTTATGTGAATAACCAATTCAAAATAAATGGTACTCAAAACA ACTTTCACTTTCAATAAGGGCGTTGTTTCAACATGCAAGGCTTTTGAAGCAGTTTAAAGCGTAGGCACGACTTATCA TTGCTTAACGCTAAAGCGTGGATTATAAGGATAATAACGCTTTGTATCAATGCTGCGTTGGATTAGTGGGGAAC CCTAGCGGCACGCTAGTAAATAAGGATCAGTCCGCGCCCAACAGCGCTAAATTTATAATGTCCATTTACCCGATAA CGGCTTGACTTA	342	PWANGSIPKSNSTVRFGGYEGVNWG KTGYITGFTADRVYITGNM/MTGNAGQ TGGGATLNFVGATEINAGATFKNLKT SQNSYMTFMALGDSSGSAKINVQSD FYDWTGGGYDFTGNGVFDVSNFKA YYKFGQTEINSYNFKNTNFLAGNFKFQ GKTTIEKSVLSDAYTYTDFGTNNFTED KFNNGSFNFHAEQTDAFNNNSFNNG SFSFNAKQVNFSGNSFNGGVFNFNNT PKVSFTDDTFNVNNQFKINGTQTTF NKGWVFMQGLLSSLVGTYYQLLNA KSVDDYKDNALYQMLRWISGENPSGT LVNKDQSAKINVAHFTDNGLTYYI KENFNNGITLTRLCTLYTHCVNIDNDA FNLKNVNNNASNTVFLNGMTTWKIA GTGVFTQDYSGANSVLVFNQTT

HP0661	343	CCACCCAAAGCTAAAGGATTTTCACTTACAACAATGAGTTAAAGTAACCTCTAAAGAACTAGATCAACGCCAAAGCA ATGAAGTCAAGGACTGTGTTAGGACTAACCTGATGTAATGTGGCGGAGGAGCGTGATGGGCGAGAAAATCTA TGTGAGAGCGTTGAAGACAGCGCTTTAAGGTTACAGTGATGGGCTGCACAAAATGGCAATATCTACCAACAC CAAGGCAACACCGTGATTGACCTGGCATGCTCAAAAGCGTGAAGTTACCAAAAGGCGCGGCGAATCGGAGCGCG GGCCAGGAGCGATTGGGGAGTGATTAAATGGAGACTAAAGGAGCGGCTGATTTTATCCCTAGGGGAAAAT ATGCTGCCAGTGGGCGGTGAGTTTATACCAATTTGGCGATCGAGAGACTTTCAGATCGGCTTATCAAAACCGG CATTTTGATATTATCGCTTACTACACGCCCAAAACATCTTCTATTATAGAAAGCGGCTACAGCGATGAAAACCTT TTCAATCCACACAGCCGATAGAGCCAGGAACCTCTAGCGAGCAAAACAACGCTTTGATTAATGAATGATGGTTA TTTGAGCGACAGACACGCTCACTTTGAGCTGGAACATGACACGAGATAACGCTACACGCCCTTTAAGGAGTAACG CTATAGGTTAGCCTATCCTTGTGAAGCCCTTTAGTCTGATAGTTCTCAAGGCTGCTCCTAATGTGTAGATAGTT TCACAAGATACATGATCACTCTATTATAGTGCCAAACATCTTCCCTACAATACAA	344	TQAKRIFTYNNEFKVTSKELDQRQSN VKDLFRTPDVPNVGGSGVMGQKIYVR GVEDRLLRVTVVDGAAQNGNIYHHQGN TVIDPGLKSVETKGAANASAGPGA AGVIKMETKGAADFIPRGKNIYAASGAV SFYTNFGDRETFRSAYQNAHFIIAYYT HQNIFYRSGATAMKNLFNPTQADKEP GTPSEQNNALIKMNGYLSDRDITLFS WNMTRDNATRLRSNAIGLAYPCEAP FSPDSSQCGCPNVLDSTRYMYHSINSA NNLSLQY
HP0661	345	GCGTTTTAAACAAGACGCGACGCTAGCGAAGAGGTGCTTTATAGATGCGGCTTGTGGGCGAACGGCT GAAATCGCTAACAGTATTGAGCAAGGTTCAAGCGTTTATAGAAAGGCGGTTGACTTATGAGAGTTGGATGGA TCAACGGGCAAAAATCCCGCCACACTATCACAGCGGACTCGTTGCAATTTATGGATAAAAGTCAGACAATC CCCAAGCAACGCTATGCAAGATAGTAAATGATGAGAAATCCCAACGCTTATCCGCTAATCATACGCTCCCA GCCAAGATCCTTTAACCAAGCTTATGCGCAAAACGCTTACGCTAAAGAGAAATTTACAGCACAGCGCTCCAAGTAT CAAAACAGCGTGCCTGAAATCAATATTGATGAAGAAATCCCTTTAAGGGTTAAATTAAGGAGACATTATGGA AAGAAACGCTATTCAAAACGCTATTGCAAAATACACTGAAGCTAAATCAGCTTTATTGACTATAAAGATTAGACATG CTCAAGCACACGCTATCAGAGCGCTATAAATCATGCCAAGGAGATTGACAGGCAATAGCAAAAAGTGCGCAAGAAAG GGTGAAGTAGCGATCAA	346	RFKKQDGTGEEVCFIDARLFGRTAEI ANQYLSKGSSVLEGRLTYESWMDQT GKKNSRHTTTADSLQFMDKKSDNPQA NAMQDSIMHENSNNAYPANHNAPSQD PFNDAYAQNAAYAKENLQAQPSKYQNS VPEINDEEIPF
HP1492	347	TCCCTTAAGTGTCTATTGGTTTACGGGTTTGATTTACCTTATTGGAGCGCTTATCCTTGAATAAAGATTTAAAC TAAACCCCTTAAGGCTCAATCAATGCCCTTTAAAGCTTAAAGGCGAAGCTGCGCATTTAATTTAGGCAACTATT CAAAACCACTTATCCTTACAAACAACCGCTATGACTCAGGAGCGATTCAAGCCCTTGCGCGAGTGATCT ATCGCTTTGATTGATGAAGGATTAGATTAGTTGAGGGGAAATGAAATTTAAGGTTTGAATAAATAAGGCTTTT AACAATGCTATAATGATAAGTTCAAAACCCACTCATAAAGTTCTGTTGTGATAACTACACCTATAGCGAATTTGT AAAAAGCTTGCAAAAACAAATGCGATAATATCGCTTTAATCATCAAGCCTGAAAAGATCAAAACAGAAATTAGAACGCAT TGAAAAGAGCAAGAGATCCTAATTTTGGCAAGATGCTTAAAGGCTAGAGACACCAATAAAGAAAAGTGGCCTT GAACCGCTTGCTAGAAACCTATCAAAAACCAAAATTTCTTAGATGAAGCGTAGAATTTGTTGAACCTCGCTCAAAA CGATAACGATGAGTTACTTTATCCTTCTCTATGAAGAGGCTCCCATTTTAGAGAACAGCGTCCAAAAGTAGAAAT TGAAATCATGTTAAGCGGTGAACCGATGCTCAAAACGCTATTATCACCTTACGCTGGAGCGGGGAGCTGAA AGCCAGGATTGGCGAGTATTGTTATCGCATGTTTATGAGATGGCGGAAAGAGGCGCTTTAAAAGCGAGATTTT AGACTATCAAGATGGCGAAGAGCGGCTTAAAGGCTGCTTATCATTAAGGCGGAAACGCTTATGGCTATT TGAAAACGAAAACGGGTGCATAGGCTTGTAAAGGATTTCGCCCTTTGATCGGAACGCCCAACGCGCACACAAAGTTT GGGAGCGTGCAA	348	PLSCLLVRLVILPLLERLSLNKDFKLKP FKAQINAPLKLKGERAHLILGNYSNHQF IPYNNRYDSGAIALARVDSIALIDEG VRLVQGEIEILRFEN
HP1492	349	TCCCTAAAGACAGCGTGTGTTGTGGCTAAAGAGTCCCTCTAGCGCTTCGGTGATGCTCAAACTCAAGCCTGACATG AAGCTTTACCCACTCAAAATTTAGGGATTAAAAATTTAATCGCTGAGCTGTGCTTAACTCAGCATAGAAAATGTG AAAATCGTGAATGAAAATGGCGAATCAATAGCGGAAGCGGATATAGTAAAGTCCAAAGAAATTAGCCCTAGAGCA ATTGCATTACAAACAAAATTTTGAACAACTTCTAGAAAATAAGATTGTCAATATCTTAGCCCTATTGTGGGGGTAA AACAAAGGTGTTGCAAGGTTCAATGAGATTGATTCA	350	PKDSVFVAKEVPPSASVMLKLKPDMLK SPTQILGIKNLIAAAMPKLTIENTVKNVNIEN GESIGEDILENSKELALEQLHYKQNF ENILEKNVILAPIVGGKNKVVARVNAE FDF

HP1492	351	AGGCACGCCCTATTAGAAACAACGCGCAAGATAAAGCCACTAAAACACATTTTGGCAACTACTTGACACACCTATT CTTATACAGAATCCATTAAAGACAGACACACCCCTAAACCTCCAGTTAGAAAGCATTGAAACGAGCTATAAAGAAAAAT TACAAAGAAATCTATCGCCTTTTACAAAGAAAGCATCACTATTGAAGACACAGAAGTTAAAAAGAAACGATTTTAAACGA TGAAAAATACATTACGCGCATGCTCTATTATATCATTAGAGATTATTGGATTTTAGCGTTTGAATGATAATGAACGC TTAAAGGCTATGGTGTGTTTCTAGCAAGCAAGCCAGATTAGCTGATTGCTTTTATGAAGTCCAAAGAAAA GTCTTACAAGAAACCCCAACCTAAGGATTTTAAACAACCTCAATCCAGCCTGATTTTGCATGATGAACAAGAAGTC AAAGAAAGGTTCACTTTTCAACATGAAGATACCGATATAGTCTTTGTGTTTAAACATGCTTTTAAACCGCTTTGATT TACCCAGTCTCAACGCTTTATATCCACAGAGAAATTAAGATGCTCAAGCCCTAGCCAGAGTGAATC GCTCTATAAAACATGCTTTTGGCTACCTTATAGATTTTGTAGGCATTCAAGAAAAATTTGACAAAAACGACTGATGA TTACTTGAAAGAAATTAACCGGATTCAATCAAGCGGTGCAATAGCGATTCTCATATCAAGACATGTTTGGCGATCG TAAGACTTTTAGAAGAAGACATTAAACCGCTATGATGATCTTTTATTACCCCATTTGACGATATAGAGGGCATGAC TAGCGCCATTG	352	GTPLLEDNAQDKATKNTFGNYLHTYSY TESIKDRHTLKLQLESITSYKEKLQEIY RLLQESITIEDTEVKKETIFNDEKYNAM LYIIRDLLDFRRLNDNERLKAMVVCFS SKQARLADCLFNEVQEKVLQENPNLRI LNKLKSSLIHDEQEVKEK/HSFKHED TDIVFVNMLLTGFDLP/LSLKRLYIHREL KDHNLLQALARVNRSYKNM/SFGYLIDF VGIQENFDKTTDDYLKELNFFNQSGAN SDSHIKOMFADRKTLLEEDIKNAYDDL DYPIDDIEGMTSAI
HP1492	353	AGGAGTTAAAAAGTGCAAGCCTGTCAATTAGCGACATTACCATAGAAAGGTTAAAAGAGCGCCCAAAAAATAAGC CAATTATCAAAAGATAGCGGTTTGGAATTTAGGCTTTAAAGTTTAACTTACCTTACAAGACAAAGTGCAAAATTATAACGACA AAGAAAGAAATAACGCTTTTAAACCGATCGGATTTAACGCCCTTGACAAAGCCCTAAATTTAGCCCTACAATGCGGCA AAACGCTCAATCAAGCGCTAGAGATTATCATCAAGACAACTCTACAATCGAAGACGCTTACTTTTGTATCGTGT GCGATGAAGAAAGCGCAAGATATTAGCCAAAGCAAAACGAAATGATATTTTAGACGGCTATGAAGAGATTGATT TAGAAGCCTTTCTCAATCTCAACGCTAGCTTTAAGAGCGTTTAAAGCGTGTGTTGATTGAAATAAAAGGGG	354	ELKSAKPVISDITIERVKRAAQKISQSK DSGLDLGFKVYTLQDKVQIINDKEEITL FNRSDLTPFDKALN/LALQCGKTLNQAL EIIKDKLYKCEDAYFCIVCDEEAQEYLA KSKNEMIFLDGYEEDLEAF/LNLNASFK ERLSVY
HP1492	355	TGCAGCTCCCCCAACGCTTATGAATCAAACTTAAAGGCAATGTTGGTGAGGCGATGGTGATGCCAGACAAG TTTTAGCCATGAATACCGTTTTGTGAATAAGAAATTAAGGCAATTCCTACTAAAGAGCGGCTTTTGGAATGGAC GCITTTAGGATTGAACCTAAATAAGAAAGAACCCATTATTCAGGCTATACCATTTATGATCCAAAGCACCGTTATTG CGACGCACACCGCAATAGTGAAATAACGCTGAAGATTTTATCACTAAAGATGAAGTGAATCCCTTTTAGAGC GCTTGCCAAAGATTATCCTACGATTGTAGAAGAGAGTAAATAAAATCCCAAGGTCGATCCGATCAGTCTTGCAA GCCTTGTTACATGAAAAATCCCATTAAGACATGCTCACTATTTAGAAACGATTACCGATATGGCCCCATTGGTTC AAAACGATGTGAATATCTTAACCGAACAAGTGAGGCGAGGCTTTCTAGGGTGATCACTAACGCTTTTAAAT	356	QLPPTHYEIKLKGIVIGEGMVPDKFLA MNTGFVNKEIEGIPKKEPAFGMDALWI ETKNKEEAIQGYTIIDPSTV/ATHTSELV KKYAEDEFITKDEVKSLERLAKDYPTIV EESKKIPTGAIRSVLQALLHEKIPKDMML TILETTDIAPLVQNDVNILTEQVVRARLS RVITNAFK
HP1492	357	CCAAAGGGAGCTTTAAATGACCAATACGAAGATGGTAAATCTATGGGATTTGACTCTTCGTGGCGTAACCAAG CCTGTCGTATTGGAAGCCAAATCCAGCCCTTACAAACCCCATGAATAAAAGAAATTCATGGTGTACAAAGCT GAAGGCAAAATCAACCGCAAGGATTTTGATCGGTAAACCTTTAGCGATGCTGCTGGTGGAGATGAGGTAAAGAT TGAGCTCAAACTAGAAGCTTACGCCCAATAATCGTTTGAAGAGATAGATATCTCTCTGCGTTTCTTAAACAG CACAAACCTTTTATCAACTTTGATACGCCATATCCCAACAGATATTCGTATTCGCTGTAGTATAAAAA	358	KGSFKMTKYEDGKIYGD/LTLRGVTKPV VLEAKIQAPLQNP/MNKKEF/VLQAEKG INRKDFGIGKTFSDAVWGDE/VKIELKLE AYAQ
HP1492	359	TCCACAGGGTGGGGAATATTTTAGGCATCTTCCACTTTAGAGCATCTTTTACAATTTTGAATCAAGGGTTTGAG CAGGGGGCGTTGCAAGAAATTGAGCGCGCATAGATAGCGAGCTTGAGCGTGAATCAAGCGGTACACTTTTGAGG GAATTGAAAGAAAGTGAGAGCTTTTACCCCTTAATGAACGAATTTAGAAAGAGCGAAAGAGTTTTTAGTTTTGTG GATAATGAAAGAGTGAATGCAATGAGCGTTTATGCTTTGGAAATCTAAGGATCTTATGAGCGAGCATAAACATTAAA AACGATTTAGCCAAATACGCCATGCTGAAAGCTATAAACCGCATTTGGCCTATAGTATTAAACGCTAGGAGCTTGCAA AATTTCTTGACTTTAAGAAAGCAGTAATAAGCCCTTAAAGAAATGCAAGATTTAGCCAAAGCCTTATTGACGCTTAC CTGGCGAGCATCAGTATTTGTTGAAGATTGTTGAAGCATTAGTTTAAACAATACCGCTTAATAGCTCATCTTTAA TGTTTTAAACCGCTTGTGTTTGTAGTATGAGATGAGATTTAAGGGGTTGTTGTAGGATTCATCACGCCCATAGTTG CGTTATGGGCGAGACCAACATTGCAAGGAGCATGCCATGCCATCAAAAAATGGCAACGCTCTTGGG	360	HRVGNIFRHSSTLEHLYNFIKGLSR GALQELSRHRIRASLSVKSSR'/TLRELK EVESFLPLNETNLERAKEFLV/FVDNEK VNAMSVLALENLRILLSEHNIKNDLAKY AMPESYKTHLAYSINARSLQNF/LTRS SNKALKEMQDLAKALFDALPGEHQYLF EDCLKH

HP0667	361	CCGCAAAATTATGGCTTTGTGCCTAACACCTTAGGATCTGATGGCGACCCCGTAGATGCACTGGTTTAAAGCGATGTG GCTTTTCAAGCCGGAAGCGTAGTGAAAGCGCGCTTGGTTGGGTTTGAACATGGAAGATGAAAGCGGATGCGATG AAAACTAATCGCTCTGCCATAGATAGATGATCGATCCACGCTTCTATGTCAAAGATATTGATGATTTATCCAAAC ACACTTTAGATAAAATCAAGCAATTTTTTGAACCTTACAGGATTTAGAGCCTAATAAATGGTGAAAGTCAAGGGGTT TGAAACAAAGAGAGTGGGATTAAGGTTTGAAGAAAGCGATAAAGCCTATCAAGGCTAAAGATTTTAAAGGTTTGG GCTCAATAGCTTAACCCCTTTTTTAAAGCTCTTT	362	ANYGFVPNTLGSDDPVDALVLSVA FQAGSVVKARLVGVNLNMEDESGMDEK LIALPIDKIDPTHSYVKDIDDLKHTLDKI KHFFETYKDLNPNKWKVKGFENKES AIKVLKAIKAYQG
HP0667	363	CTAACCCACCCATTACGCCGTGCTCTCAAAATTTGATGAAGAACACCCCTGTGCTGTGGTAGTGGCTAAAGGCACG GATTATTAGCCATTAGGATTAAAGGCGATCGTAGAGAGCATGACATAGAAATATAGAAATAAACGCTCGCCAGA GAGCTTTATAGAGATGTGAATTAAGCTGCTGACATACAGAAAGATTTTGAAGCCGTGGCGATAGTCTTCGCTCA AGTGGCTAAATTAGAGCAAGAACGCCAAACAAAGATCATTAACCTCTTTAAGATTTTTTAAACCCGCTTTAAGC CTAAACAAACACTCAATCAAAAGGCTTTAGCTATTCTATTGAGCTTTAAATTTGATGTTCCAAACGCCTTAAAGTG TTATGCACATATTCTAAAGCCACCTAACAGGCTTAAATAAAACCCCAATCGCATGCCATAGTATTTAGTTT GAATGAACATGCTAGAGCATAGCACCCACCGTAAAGCCACGATCAAAATGAGCGTGTAGCGTATTCATACAAAC CCAAAGGCGTTTGCAATAGATTAAACAGTATCAATAAAGCGGAGTGTAAAGGGGAAATCCACGCA ATCAGACACGCTTAAACCTTAAACTCTGTAAAGAAAGCAAAACCCACAGATGCAATATTATAGAGGGCAA GAAAGATTGCTTCATGCTAGCCCTTAAACCTTAAAGCTGTAAGAGCAATAAAGTCCGTAACAGCGCAATAGAAAGATAAGCA CCATTAAAGAAATCTTAAACAGGAAATTCAGCGGTAGAAAGAGGCAATATCTCCACGCAAGCGCATTTTGGC GCGTAGGGGTGAAAGGCTTTAGATAAGCACAGCAGATAAATTAAAGAAAGCGCTATTAGCCCAATAATCTAATT TGACAATGAATCATAAACATGGTTTTCAACAAACAAACAAATTCGCTGAAATGCGAAAGCAACA AAGTTCCACAT	364	NPTHYAVALKFDEEHPVPVWAKGTDY LAIRIKGIAREHDIIEIENKTLARELYRDV KLNAAIPEELFEAVAIVFAQVAKLEQER QKQKIIPKL
HP0667	365	AGTTATGACGGATAACACCAACAAATGAAACCATGAAACAGCAGTGAAATTCAAAGCTGATGAGATGCGAG CCGGAGCGTTTGAGCGCTTACCAACCGCAAAAGCGTTTCAGAGAAACCGCAAAACCGCAGAGATTTCAA CCATGAAGCGCTTCGCACCATAAAGAGAGATCGCCCTAAACAAACCAACCAACCAACCAACCAACCAAC CCAAACACGAAATTACGCCCAAGAAAGATTGGATAGCAACAAAGTAGAGGGCTTACGGAATTTGCGATGTGAAT GAGAGAGGACTTTAGGCTTTCATAGGAGTTAAAGGCGGTTGAAGCGGATAACAGATCCAAAGTGGAGCATTT AAACCGCATTTAAGATGAATTAACCTTAAAGCGGAGCTTAAATCAACGCTTTAGGGGCTTGGTGAGATTG GGGGAACATGATGTTGATGAACCCCAAAAGCGGATCGTATTGATGCGGCGATGAGCTTCCCTAAAGAGGG GCTCTTTGGCGTGATATTATCCCGGATTTTCTACTTGACCAATCAAGGACAAATCGCTGCGATTATCAT CACCATGCCATGAAGATCACATAGGGGCCACCGCTTATTGTTTAAAGAGCTGCAATTCGCCCTTTATGGCACGC CCTTGAGTTGGGCGTATTGGGAGCAAGTTTGATGAACATGGTTTGAACAAATACCGCTGATTTTAAATCGTAG AAAGCGCTGCTCCATTAGCGTGGCGAAATTTATCATTTGATGATCC	366	VMTDNNQNNENHENSSSENSKADEM AGAFERFTNRKKRFRENAQKNAEYSN HEASSHHKKEHRPNKPNNNHHKQKHA KTRNYAQEELDSNKVEGVTEILHVNER GTLGFHKLKKGVEANNKIQVEHLNPH YKMNLSKASVKITPLGGLGEIGNMM VIETPKSAIVIDAGMSFPKEGLFGVDIL PDFSYLHQIKDKIAGIITHAHEDHIGATP YLFKELQFPLYGTPLSLGLIGSKFDEHG LKKYRSYFKIVEKRCPISVGEFIEWI
HP0667	367	AGTGCTCAAACTTTAGCGGATAAATTGCAAGCAGAAATCCAAATTACAGCGTCAAGGTTGCTTTAAAGACGATTT GTATAAGTTTATGTTCAAGGTTTCAAGCGAAGAGAGGCTAGGATTTTATGAAAAATACACCAAGATGCGGT TTTAAACGAGAGATGATTAGTTATTGCTTTTAGATGGTGGCAGCTCACAGACGATCGTTGATTTTATGATGAA AATTTTACGAAATCAAGGCTTTTAAATGTCAAGACGCGCTTGGCATGACGCTATGGCAAAATAGGCAAAATC GCTATCATACAGGAAGAACTTCAATCATGTGTGAAACCGCATGGAGATTGGGCTTTCAGTTTGTATGGGC GTTGAAATAAACACCGTTATAGCGGCTCAAAAGACTTGCAATTGAGCGCGCAAGAAATCGCATGCGTGGG CG	368	GAQTLADKLQAEENPNYSVKVAFKDDL YKVLVQGFQSEEEARDFMKKYNQNAV LTRE
HP1073	369	GGCGGTTTTTATGCTGGCTTTTACCCCATAAAGCAAGGCGCTTAAATCGCTAAATTTTAAACGCTT TAGCGTATTTGGAAGAAACCCCGTGTTTATGAAAGCCCGCACCGATTGTTGGAGACTTTAAAGGATTTAA ACGATCTGGCTAAAGGCATGCATTTGTTGCGGCTAAAGAGCTTACCA	370	RFFYAGFLPHKSKERRLKIKNALAY LEEKTPVVFYESPHRLLETCLKDLNLA GMHLFAAKELT

HP1073	371	AACATTAACCCCACTCACTCACACCATCTTTAAAGCCTTATGGCTAGGCACAGCCTTAAGTGCATCTTTAAGTTTAG CCGCAACAGAAAGCCCACTAAACAGAGCCTAAGCCCGCTAAAGGGTTAAACAAAGCCCAATCGCCCGTTAC TAAAGTCATGATGACCAATTGCGACAATATTAAAGATTTTAAAGCTAAGCAAAAGAGTCTTAAAGCCGCTTATCAA TTCCGGCTCTAAAGAAATTTAGGCTATGAATGGCAGCATTGCATGGAAGAGTCTGCGCAGGGGTTTATAAAAT CAATTTTTCGGATCCGAGCGCGGGGTATCATCTTATATCCCAAGCTTCTAAAGAGTCTGAGCATAATGATAG CCCCCTTTTTCGGTAATGTGATGGGGAATGCTCATTAAAGACATGATTAATCTTAAACAAAGGCGAGTCTTGGAAAG GCTCTATTGGAAACACGCTACCATGACCAATTTAAAGACATGATTAATCTTAAACAAAGGCGAGTCTTGGAAAGCTA GAGCGAAATCTAACGCTGATGCTGATAAATATTACGAAGAGATACAGACAGATCAAGGCTTGAAGAAATCTA AAATCTTTGATTGCGAGTCTAGTAATGACCAAGAAATGCAAAAGAGCTAATAGCAACCTGATTTAGACCTATCG GCAACGCCATGCCCAAGCCTTAATTGCCAAGAACTAAATAGAAAGCCCAAGCAAGAAATCCCAAGAAATG AAGAGACAACTAGCGAGCAACAAAGTAAGCCAGAAAGCAAAAGATAAACCCATGTATTTGGCGCAATCAA CAGCACTGATTTACACCCGTTAAAGAAAGCCCAAGAAAGCGGTAAAGTGAGCCAAACACACTCTTTAAGAAATAA CATTAAATAATGTAAAGAAACACGCGCAAAACCGCTTCCAAAGAAAGAAATGTGCAAAATTTGCTCTCCAGGCA AAGGAATGCGATTT	372	HLTPLTHIFKALWLGLTALSASLSAAT ESPTKTEPKPAKGVKNKPKSPVTKVM MTNCDNIKDFNAKQKEVLKAAAYQFGS KENLGYEMAGIAWKESCAAGVYKINFSD PSAGVYHSYPSVLKSY3HNDSPLRN VMGELLIKDDAFASEVALKELLYWKTR YHDNLKDMIKSYNKGSHWERSEKSN DAEKYEEIQDRIRRLKIE:SKIFDSQSSN DQELQKSANSNLDLDPIGNAMPQALIA KETKIEETOAEKSQEMKETTSEQTKSK PEKAKDKPMPYLAQINSTDFTPVKKSPK KPAKVSQKHSHFNKNIK NVKNNAKTAS KKQEMCKNCSPGQRNAILANHITLMQE
HP1073	373	CATGATACAGAGTTTACAAGATTGAATGCTGCTGACAATAGCGGCTAAAGAAATCATGTGCATTAAGTGTTAG GAGCAGCCACAAACGCTATGCGAGCGTGGTAGCGTGCTGCTCCGTGAAAGAAAGCTATCCCTAATGGTAA GGTGAAGCGCGGTCAAGTCGTCAAGCCGTTGTGGTGAAGCAAGAAAGAAATCCAAAGAAAGAAATGGTTCTTTG GTGCGTTTGTGATGACAATGCAGCAGTGATCTTGACGCTAAAGAAAGATCCGGTTGGCACAAGGATTTTGGGCCAGT GAGCCGAGAGTGCGTTACGCTAATTTTCATGAAAATTTCTCTAGCACCGGAGTTGTATAATGAAAGCGGAAATC AAAAAATGACATAGTAAGTCAATGCGAGGAGCAGTAAGGTAAAGTTCGCTAAGGTTTAGCGGTGTTGCCTAA GACTTCTCAAGTGGTTGTTGAAGGTGTAAAGTGGTGAAGAAAGCGGATTAACCTACTGATGATAACCCCTAAAGGG GCTTTATCCATAAGAAAGCCCATGCACATTTCCAAATGTGAAGAAAGCCTAAGGAGTTGGATACATGTTTGGTTTGA AACAAATTTTATCAAGTGAAGTGAGAAACAACTCGCTCAAGAAATTAGACATCAAAACCCCATGCTTTTACCCCAAGC TAGAAAAATCGTTATCAGCGTGGCGCTGGGCTCATGCAAAAGACATGAAATCATGCAAAATATCGCACAAAG ATTTCTTTGATTGCGGCAAAAGCGGTTATCACTAAAGCGGAAAGAAATCCGTTGAGGCTTTAAGATCAGAGAAAG CATGGCGGTAGGGCGAAAGTTACCTTAAGGAATAAACGCGATGATAATTTCTTAGAAAGCTGATTGTGATTCGTT ACCCAGAGTGAAGACCTTAGAGGGATTTCACGGAATGGTTTGTATGGGTGCGGGAATTACACCTTTGGGATCAATG AGCAGTTGATTTTCCGGAAG	374	MIQSFTRLNVADNSGAK'EMCKVLGG SHKRYASVGSVIVASVKKAIKNGKVKR GQVVKAVVVRTKKEIQKNGSLVRFD DNAAVILDAKKDPVGTTRIFGPVSREVR YANFMKISLAPEV
HP1073	375	AGGTGTTCAAGACAGCAAAAGACGCTTGGGGTTTCATCTATGAGATCAGCGAGTTTCATGAAAGCCTATACCGCA TTGCTAAAAAACAAGACCGATACGCTATTTATTGAGGTATCTCCCTCTAGGTATTGGCCAGCATTTTAACGACT GCCCTTTATGTCAATACCTGATTTTGACGCTTTGAAAGCTTTGGTGCTTATTATACCAAACTTGGATTGCAG GAGGCACGATCAGCGCATCAAGCAACCAAGTATCAACATTAACAAACGTTAAAGCAATAGAGCGTTGAAACC ATCAAGAGCTTATTTGAATAGCATCGACTCTTATACACCTTTGATCAATACCTCTATACTTATGGGATAGCTCTT CTGTTTATCATAGCAATGGGTGCGTCTGTCTTAGCCCTAGCTAATTTTCATGGCAGATGAAGAGAAACCCCAT TTATCGCTATGGATGCCGAAACCAAGTGAGCATATTTGCCACAAACGCCCCAAAGAGGCGAGTCAATGGAAACGC GGATTTTGACAAAGAAAGAGAGAAATGGTAAATAATATCGCGAATTTAACCTTTTAAAGCGTAAAGAAACGC GCATGCTTTAAACGGGGATTTTGTGATGAAAGAAAGAAATTTATGAGCGCAAGACACGAGCAAGTATTAGCTGTTA TGACATCAATAAGAAATTGTATAGCAATTATAGGAAGTGAATGAGAAAGTCCCTCCAGAGCGGATACAAATCTTTGTA TAACACTATCACGCTGTTTACACATAGAGGGGCAAGAGATGATTTTGAAGATGATTTTGTATCTAGTA	376	VFKDSKKDACGFIYEISE:FMKAYTALLK KQDRYVYLLRYLPSRYWASILTALYV KYPDFDALKKLLVSYYYQTWIAAGTTTR IKQTSINIKNVKSNSKSV:TIKELJNSIDS YNTFDQYLYNLWDSSSVYHSHKWWRPV LALANYFMADEEKPHFIAMDAETQVEH ILPQTPKRGSQWNADFJKEKREEWVN NIANLTLLKRKNHAHALNGDFDEKRIY GGKDTSKVISCYDITKEI.YSNYRKWNE KSLQERYKSLYNTITPVI.HIEGQEDDFE DDFDL

HP1198	377	AATTAGTCAGCTCTCAGAAATACGCTAAACCTCAATGCGATTGACAAGATTAAAAACCGAAGAAAAAGCAAAAAG TTTTAGATGAAGAAATTAGAAGATGGCTATGACTTTTGAAGAAAAAGGATTTTTAGAGTGGAGCAGAAAGCGATAGCC CAGTGGCGCATGTATTTGCGCGAAATGGGGATATAAACTTTAAGCAAGATGAAGAGATTGAATTGAGCAAGCAA ATCCGCTTGGGTGAAGACATTATTTAGACGCGATCTGCTCGTCCGTTTATGATTGATTATCTATCGGTATAA GACGCTTAATCAATCGTGAAGAGGGTTAAGAGCTTTTACGAGCTTTTATGATGACGATGAAATAGCGTGAG CGATTTAAAAAGATGAAGACAACGAAGAGATGAAGAAACGAAGAAAAAGTCTGTTCTGAAAAAGACA AGAAGCGGTAGAAAAAGTTCAAGAAAGCTTTAAGCCCTAGACAAAGGCTAAAAAGAAATGGCTTAAGCCCTTGAA GCCCCATAGATGAAGAGAGACGAATTGGTGGCTTCAATTGACCTAGCTTACAAAGCCCAACACTCAAGACAG ACTCTATGATTAGAACCTACCAAGCAACTGATTAAATGATTAAGTCAAAACGATGAAACCACTTTAAAAAGCGCGA TGGGTTGAAAAAGAGTTGAACGCTTGGAAATACAAACTGCCCTTATTCATGACACTCTCATCGCAACCATAAAAA AATCCTTGCCAAATACATAACATGACTAAAGAGATATTATCGCTCAAGTGCCAGAGCGACTATGGTGAGCGGTGTA TATGGATCTTAAAAAGCTTTTTTGGACTAAAGAGCGAGCGAAGAGCTTTGATCTAGCCCCCAACAAAGCTAAAAA AATTTAGAGCAAAATCAAAAGAGGGAAGTTGATTTCCGATCGCGCTAAAAACAAAATGGCTAAATCCAATTTAAGGTT GGTGGTGAGCATCGC	378	LVSSSEYAKKLNKIDKIKKTEEKQKVL EELEDGYDFLKEKOFLEWSRSDSPVR MYLREMGDIKLLSKDEEIELSKQIRLGE DIILDAICSVPYLIDFIYAYKDALINRERR VKELFRSFDDESDNSVSDSKKDEDE EDEENEERKKVVSEKDKKRVKQVES FKALDKAKKEWLKALEAPIDEREDLV RSLTLAYKRQTLKDRLYDLEPTSKLINE LVKTMETTLKSGDGFELKRLKLEYKLP LFNDTLIANHKKILANITNMTKEDIQV PEATMVSVYMDLKKLFLTKEASEEGFD LAPNKLKEILEQIKRGLKISDRANKMA KSNLRLVSIKRFSTRGLPFLDLIQEG NIGLMKAVDKFEHEKGFSTYATWWI KQAIRAIADQARTIRIPIHMDTINRINK VMRKHIQENGKEPDLEWVAEEVGLSLD KVKNVIVTKEPISLETVPVGNDDDGKF GDFVEDKNIVSSIDHIMREDLKAQIESV LQQLNEREKAVIRMRFGLLDDESRTL EEIGKELNVTREVRVQIESSAIKKLRSP QYGRILRNYLRI
HP1198	379	TGAAACTAGTTTAGCCAAAGATACAAGAAATCAGACGCTAAGAGCGTGGAATTAGAGGATTTGTATCACGAATTCA GTGAAGATAAGCGTTCTATTTCTATTTGCCCCACAAACGCCACAAAGACATGCTCAAGCGGTGATTTTTTCA AAGAAAAAGGTCATAGCGCTTATTTAGATGAGGTGAGGTGAGCACTGATGAAAAAGATTTCTTTATGAATTGCACA TTATTTAAAGGCTTGATTGAAGTTTATATTGAACCATGGTTGTGCCATGAATCTAGGGATAGTGAGCATTTATT GAGCGAGCTGTCCAAACTAGACTATAAGAGACCAATGACCCTAACACAGCGGATTTGATTTAATCAACACTTGCA GCGTGGCGGAAAGCCTGAACGAAATTTTTCAGAAATCGGTCAATTCGTAAATCAAAAAACCCAAAGCCCAA ATCGGGGTTTGGCGGTGCACAGCCACATGGGAGCGGATTTTGAAGAAAGCCCAAGCGGTGAGC	380	KLVLAKNTRKSDAKSVELEDLYHEFSE DKRSIFYFAPTNAHKDMLKAVDFFKEK GHTAYLDEVRSVSTDEKDFLYELHI
HP1198	381	AAGAGGGGTTTAAAGGTTTACTCAATAAAAGGGCAAGCTCATTAAAGAAATACAAACCTTAGAGCCTTTAAAAA GCCTAGAAATCCGTTTGAAGTGAAGCCCATTTGATAACGCAATGATTTTATACCATAGACCACTTATGCCCTT TTTATCAAAAGGCTCGAGCGCTCATTAAAGGGGTTATGTTGATGAATCTTTTATACCAAGGATTTGGAACCTCA CTGAGGGCGCTAGGAGCAATCTTGTTTTAGAAATCCATAACAGGCTTTTAAACCCCTTATTTAGCGGGCGCGTTA AACGGGACGGGTGTTGGGGTTGTTAAAAAGGGTCTTGTGGGATGCACCTTTGAATTCGAAGATTGCAAAA AGCGTCAAAATCTATTGATTAAACGCGCTATATGGCTTAGTGAAGTGAATAAAATACTATAAAAAACAGAGCGG CTAAACCTCATTTTAGAAATAGGTTACCAATGGAGCAAAAAGTTAAACTCGCCACATAATCATATGATTAA AGTTTTCATATTATAATCCGTTTACACAATTATTATTAATTCAGTAGAGGTTTGTAGGAACCTCTCATCAA AAACAAAGGAACATAATATGAGACATGGAGATATTAGTAGCAGCCAGATACTGTGGGTGAGCGGTAGTTAATTATA AGATGCTTAGACTCCACACTAAGATGAGGTGTTGGAAATTTGCGCAATATCGTAAGGTGATGGTGGGTCAAA CAGGGTTTGCCTGGTTGATCTGATTATTTCCCTGAATACAGCAGCATGGGATATGTATGACAGACAGAAAT GTTTGATACAGCGCGAAGCGTTCTGAGAGAAACCGCATCTTTGCTGAAGCTTTGAAGAAAAACAGGTTTGGG GAGTGTCTCTTTGACAGGGGAAAAACACGAGCAAGCCAAAAAGATCCCTATAACACTTTGATCTTGTCAATGATA AGGGTGAGATCGT	382	EGVLRVLLNKKGKLIKEYKTLEPLKSLEI RLSEAPIDKRNDFLYHKTTYAPFYQKA RALIKKGVMFDEIFYNQDLELTEGARS NLVLEIHNRLTPYFSAAGALNGTGAVG LLKKGLVGHAPLKLQDLQKASKIYCINA LYGLVEVKIK

HP1198	383	TGGCAGATGAACGACGCTCTGAGACAAAAACAGAGAACTGAACAAAAATAGATTGGCAAAAAGATTATGAC AGGAAAAATTAGAACGAGATAATAGGATTAGAACAAATGCAAGAGGATTTATTAGCCGCTAACGAGAAATCTAAG AAATAGAAATCCAAAGATGGGAAATGAAAAACCAAGCTTGATCCAGAGATGAAAGAAATAAAGAGTTAGAAAGA AAAAAGGAAATTAGAGGAAATTTAGCCCAAAAGAGAACGCAACAAATAATAACACTCTTTAGTCAAAAATAA GCAATTAGAACTGAGTTAGATATGCTTAACGAAAAATTTGAAAACTGAAAAATATGTATGCTGGGTAGAGGATTT TGAAAAACGCCAAAAAATATCAAGAGATATCAAGAAACAAATTTGAAAAACCAACCCCAAGCTTTAGGCGCACCTTCAAAACGAAGT GGAAGAATTAGCGTTCTTAGAGCGTATAGAAAGGGCATGCAAGAGTTCAATGTTTCTATCCCAAGCGTTTATTGTA TATGTTCCACACCGCTTTAAAAAGCACGCTCTCTATCGCCATTGAGCGTCTAAGTGGGTGAGTGGGACAGGAAAT CTGAACTGCCCAAGCTCTATGTGCATTTGGGGGTTAAATTTTAAAGCATTGCTGTGCAGCCTACTTGGGATAGC CCAGAAATCGTTGATGGG	384	ADETNALRQKNRELNKKIDWQKDYDR EKLERDNRDLEQCKEDLLAANENLRN RIQEWENENKLDPRCERIKELEEEKR ELEGILAQKENAEQKYITLSVKNKQLE AELDMLEKFEKLNMYAGVEDFEKR QKNIKEQIVKTNPKVLGAPSNVEVEELAF LERIEKGMQEFNVFYPKRLLYMFHTAL KSTLSPLSVLSGVSGTGKSELPLKLYV HFGGLNFLSIAVQPTWDSPESLMG
HP1198	385	GAATGGGTGGAGATTGTAGGGTTGGAGCATTGGATAAAGTGATTATTAGATCAAGCCCCCATAGGCAAAAACCC CACGAAGCAACCCCTGCCACTTACACGGGAGTGATGATGAATCAGGATTTATTGCCGAGCAAAAAGAAAGCTAAA ATTTAGGCTATAGTGGAGCGCTTTAGCTTTAATGTTAAAGGAGGCGGTGCGAGAAATGCCAAGCGGATGGGG ACATTAATAAGAAATGCACCTTTTGGCTGATGTGTTAGTCCAATGCCATAGCTGAAGGGCGCTAAATACAAACCCCC AACTTTAGAAATCAAGGTGAAGGCAATCCATTGCCGATGTGTAACATGAGCGTGAAGAGGCTTATGAATTTT TTGCTAAATCCCTAAATCGCGTGAAATTAAACGCTTATGGATGTGGCTTAGGCTATATACATTTAGGGCAAA ACGCTACGACTTTAAGTGGGGGAGGCTCAAAAGGATCAAAATAGCTAAAGAAATTGAGTAAAAAGACACAGGCAAA ACCTTTATATTTTAGATGAGCCTACTACCGGTTTGCAATTTGAAGACGTGAATCATCTTTTACAAGCTTTGCAATCTT TAGTGGCGTTAGGCAATCTATGCTAGTATTGAGCATAATTTAGACATTATCAAAAACGCTGACTACATTTATAGACAT GGGCGCTGATGGGGGGATAGGGCGGAAAGTCATTGCGAGCGGCGCTTTAGAGGTGGCGCAAAATTTGCG AAAAACCCCAAGCTACACGGGAAATTTTAGCTTTGGAATTGAATAGCTTGCAATTTGTTGTAGAAACAATGTAG GGCTGAAATAACAGAC	386	NGVEIVGLEHLDKVIYLDQAPIGKTPRS NPATYTGVMDEIRILFAEQKEAKILGYS ASRFSFNVKGRCEKCCQGGGDIKIEM HFLPDVLVQCDSCCKGAKYNPQTLEKV KGKSIADVLNMSVEEAYEFFAKFPKIAV KLKTLMDVGLGYITLGCNATTLSSGEA QRIKAKELSKKDTGKTLYLDEPTTGL HFEDVNHLLQVLHSLVALGNSMLVIEH NLDIKNADYIIMGPDGCGDKGKVIAS GTPLEVAQNCEKTSQSYTGKFLALELK
HP1198	387	CGGATCTTACGGATTCTTGATGTTATTAATAAAGTTACGACCCCAAGGGTGCCATTGAATCTTAAGGACTTTAAT TGATTTTACGCCCAAAATTAACACGCCCTGAATTTAGCGGOCACAAAGCCATAAGGGGCAATACAGAAAAGCGGCG AGCCTTATATTGTCATCCTATTGCGTGGAAGCTTGAGCGTTTGTGGGGCGGATGAGCGGATGGTGTGTGCT GCGCTTTTGATGATGTTGGTGAAGACACGCTTGTAAGATTGAACCGATTGAGCAAGAAATTTGGCAAGATGTGGC TAATTTAGTGGATGCGCTCACTAAATCACTGAATCAGGAAGAAGAAATAGGCGTGAGCTCTCAAGATCCCAGAA TGGTGGTTTACGGCTCCTTTAGAAAGATTTTAAATAGCGCGATACAAGATCCAAGAGCCTTAGTGGTAAAGATTA GCGACAGGTTGACAAACATGCTCACCCTTAGACGCTTGCCCTCATGACAAAGCAAGTCCGTAATTTCTAAAGAGACTCTA GCGGTGATGCCCCATAGCGAGCGGATTGGGCTGCTTCAATCAATCAAAATGAATTAAGAGACAGAGCTTTTATTAT ATTTATCCAGAAGAGTAAATAATATCAAGGAATATTTGACAAAAACAAAGCAGTCTTACTTTAAAGCTCAAGCGCTT TTGCGAGCAAGTTAGAAAAAACTTTTGTAGTGGGTTAGCCATTGCGGATTTTAACTCGTTACAAGGGTGAAC GCCCTTATCTATCTTAAGATGCAACGAAAGGGCGGTTAATATTGATGAATTTTGGACTTGTAGCCATTA GGATTTTATTGAAAAACCCGATTGATTGCTATAAGTTTGGGATTATCCATTGAATTTCAACCCCATTTGCTCTCG TTTTAAAGATTACATCGCTTTGCCCAAGAAATGGCTATAAGACGATACACACGACCATTTTGTATGAATCTTCTGTT TATGAAGTGCAG	388	GFLRILDVKKVTTKPGGIEILRTLDFTF KIENALNAAKSHKGQYRKSGEPYIVH PICVASLVAFCGGDEANVCAALLHDVV EDTPCKIETIEQEFQGDVANLVDALTKI TEIRKEELGVSSQDPRMIVSALTFRKIL ISAIQDPRALVKISDRLHNMLTLDALP HDKQVRISKETLAVYAPIASRLGMSIK NELEDKSFYIYPEEYKNIKEYLHKNKQ SLLKLNAFASKLEKKLFDSGFSHSDFK LVTRVKRPYSIYLMQMRKGAVNIDEILD LLAIRILLKNPIDCYKVLGIHLNFKPIVSR FKDYIALPKENGKYKTIHTTIDESSVYEV QIRTFDMHMGAEYGNASHWKYKAGG VDHEDHHEGMRWLQNFKYHDSDLKN DPKEFYELAKNDLYREDIVVFSPHGD YTLFPVGAIALDFAYMVHSDLGDKATDA YINSKALLNQELRSGDVVKIHK

HP1198	389	ACCCAAAGAGAGGGTTTAAAGCGATGAAGAAATCAACAACAGGGCTGAAGGATCGCTAAAGCGAGTTAGAGAAG GATACGAAGCTCGTTTCATCACACGATCAATACGAGCGCATGAAACAAAGCGGATCGCTCAACACGGAACCTTAGA TTGCGACATTCAGCAACAGCTTACAAGAGCTGAATCAAAATGCTCCAAATCGTGGCGGATAGGAAGTATA TGCCCTACACTAAAGCGGTGCAATTTCTTGAATAACCCCAATCTTAAAGATTTGGAAGTATTGACACCCAGGAG TGAATGACCCCATCGCTTCAGGGAAGACGACCAAGCCTTATTGAAAGATTGCGATGTGTTTATCATAAGC TCTTCTAATCAGTTTTTAACGGAGAGCGATATGAGTTTGTACAGGGTTCTACAAAGAAAGCCTTCAAGAAATTT ATTTGTGGCAAGCCAGCGATAGCGCTGTTCTTCTATGAGTGAAGTGAAGAAATCTCGCCACCACTCCCCACA GCCTTAGAAACGCGCAAAATCCCTTTCATCTTCTTAAATAAACCATGGAAGCATTGATTCAAACAAACCCCTAAC CAACGAGGATTTTGAAGAGCGATCAAAACGCGCTATTTGACTTCAGGGCTTGCCTTAGCATGTATAAGGA TTTCAAAACCAAGCTTCTTGGAAGCAAAAGAGAGTGTACAATGCATGGCGGAATTTAACCAACGCTTACCC CCTGACGCTTTTAACAGCGTTGATAAATCTGAAGAAAGCTTATTCTTAAGCAATATGGCGCGATT	390	PKERVLSDEEINNRAERIAKSELEKDTK LVSSHQYERMKKSGLNTENLDSHIC ANSLQELNQKLLQFVGADRYKMPYTK AVQISLNNPNLKDLEVIDTPGVNDPIAS REERTKALLKDCDVVFISSSNQFLTES DMSLFDRVSNKESLQEIYFVASQADSA VLSMSEVEKSRHHLPTALENAQKSLSS SLNKTMEALIQTNPNQRGIFEKAINGV ILTSGACFSMYKDFKNQASWESKKEE CYNAWRNL TNAYPLTLLTALINLKAYY S
HP1198	391	AAGCGAAAAATATAGAAAGGTTTGAACGCTATGATAAGCAACACCAACATCAAGACGATCTCGCTATTCA GTATTTACCAGCGTGGCGCCATGGCTTTCGCTAAAGAGCGCTTGCCAGCTCTATTGATTTTAACGATCTGG TTTCTATTGGCACTGAAGAAATGATTAAATAGCCAGCGTTATGAGAGCGCTTAAACGATCTTTTGGGGTATG CGAAGACTCGTCAATGGGCGATGTTAGATTATTGCGCTCTTATAGATGTTCTCGCTCTAGCAGGAACTC ATTAAGCATTGATATTGAATCACCAACACCTTAATGAGCATGGAAAGAGCTAGCGATGCGTATTTAGCGCAA ACTTTAGCGGAAATATTGAAGAAATTAAGAGCAAGCAAGCGCTTCAAGATTTATGCGTATGCGCAATAGATGAA CAATTCATCGGATTGAGCAAGATGAATCACTAAAAAATGAAGCAGAGAGTTGTAGAGCATGTCCAAAAGCG CTGAATCAATGAGCGAAAGAGAGCAATCCTTATCCAGCTTATTACTTTGAAGAGTTGAATTTGAGCGAGATTAA GAGATTTTAGGCATTACTGAATCGCGCATTTCTCAATCATTAAGAGTGAATTAAGAGTGGCGTAAATCCTTAGGA GTGGATCATGGCTGATATTTAAGCCAAAGAAATGATGCGCTTTTGAAGTGGTGAATGAATGTGGATATTCA AAATGTCCAAAGAAAGATATTATCCGCGAGCGAGCTAACCCTCTATGATTTCAAACGCCCTAATCGTGTAGTAA GGAGCAACTCGCTCTTTAGGAGTATCCATGACAAATGGCTAGGAATCTTCTAGTCAAGTCTCTTCTATCATCGG TTCTATTGTAGAGATCCAGCTCCATAGCGTGGATCAATGACTTATGCGCAATTTTGTAGTGTGCTAGCCCTAC AAGTTTAAATG	392	SEKNIEVLNAYDKQHHHDDLAQY LPVARAMAFRLKERLPSSIDFNDLVSIG TEELIKLARRYESALNDSFWGYAKTRV NGAMLDYLRSLDVISRSSRKLKSIDIEI TKHLNEHGKPSDAYLAQTLGENIEKIK EAKTASDIYALVPIDEQFNAIEQDEITKK IEAEELLEHVQKALNQMSEREQILQLY YFEELNLSEIKELGITESRISQIIEVIKK VRKSLGVDHG
HP1198	393	TGAATACACCGCCTCAACAAACGACCGAGCATGATTTAGAAATGATTAGCGGACCGGTGTGTAGAGGGCATTG AAAATTACGGCGCATTTCACGGTAAGCCCTAACGAAACGCCCTTTTGTGTTGTTGATTTTAGGGATTTTG AGCGGAGTTTGTAGTGTGATGAAAGCCATGTGAGTTGCCACAGTTTGGGGGATGTATGCAGGGGATAT GAGCAGGAAAGTGTGGAATATGTTAGTGGCTAGCGCTTATAGACACCGCCCTTTAAATTTGATGA ATTTATCCATAAAATGCGAGTTCCCTTTTGTGCTCGCTACGCCCAATAGCTAGATTAAGCTTTCCAAAAGAA GTGCTGAGCAAAATCATTCGCCCTACAGGGCTTTTAGACCCCTAAATTTGAAGTGGAGACAGCGATAAGCAAGTCCA GGATTTGTTGATGAAATCAAGTTAGTGGTGGCTAGAGGTGAAGGGTGTCTCATCACCGCTCACTAAAAAATGG CAGAAAGAAATGTGCAAAATATTATGCTGAATGGGCTTGAAGGCGCTTACATGCATAGTGAATGATGCGATTGAA AGGAATCACATCATCCGCTCTTAAAGGCTTAAAGAAATTTGACATTTAATAGGGATCAATCTTTAAGAGAGGGCTG GATTTGCCCTGAAGTCTCTTAGTAGCGATCATGGATGCGGATAAAGAGGTTTAAAGGAGTGAACAAAGCCTCAT TCAACCATGGGGGAGCGCTAGAAACGCTAATGGCAAGTTTATTATACGCTAAAGATCACTCAAGCATGC AAAAGCCTTTGAGATCACTAGTTACAGGCGCGCAACAAAGAGTTCATAAAATCCATAACATCACCCCAAAA CCGTTACGCGCGCTTGAAGAGGAAATGAATTAAGAGACGATGAAATAGAAATGCGTAAAGCCTTAAAAAAGGAC AAATGCCTAAAAAGTAA	394	EYNRLKQRTHEHDEMISATGVCKGIEN YARHFTGKAPNETPFCFLDYLGIFERE FLVIVDESHVSLPQFGGMYAGDMSRK SVLVEYGFRLPSALDNRLPKFDEFIHK NCQFLVSATPNKLELELSKKNVAEQII RPTGLLDPKFEVRSDKQVQDLFDEIK LVVARGERVLITTLTKMAEELCKYYAE WGLKARYMHSEIDAERNHRSRLKE FDILIGINLLREGDLPEVSLVAIMDADK EGFLRSETSLIQTMGRAARNANGKVLL YAKKITQSMQKAFETSYRRRAKQEEFN KIHNTPKTVTRALEEELKLRDDEIRAK ALKKDKMPKSEREIKIIEKDKMRECT KNLDFEEAMRLRDEIAQLRTL
HP1198	395	AGAATCTTACGAGCCTTAAAGCTTCGCAAGAGTGCAGGCTAACACGCTTAAAGCAATCGCAAACTTTAGAGG ATTTGAGGAATGAGATTCAGCTAACCGCAAGCTATCCAGCAGTTAGACAAAGCAAAATAAGAGATGAGTGAATTAT TGACCAAGTTAAGCCAGGATTTGTTTACAAATCGCTTAATCCAAAAGCTCTCAAGAGCAAGAGGAAAGCT GAAAAGCCGCTCAAAATCAACGCTCCGGCTAATAAAACCCCTCTTTGAAAGCCGAATCCCAAAAAATCAAGAGGG AAAACTCAAGAAAAGGCAAAATGAGTTGATAAAGACTTGTCTAAGCAAAAAGAGATCTTTCAAGAGCTCTGTC TTTTTTAAAAATAATCTATGCAGAGCCAAAGAGCGTTTGTGTTGTTAGAGCCCAATAGTTACAGACTTTATTAT GTGCGTTATGTTCTTGAGAAAGTGGCTTATG	396	ESLRALKASQEQVQANTLKQSQSTLEDL RNEIHANQQAIIQQLDKQNKEMSELLTK LSQDLVSQIALIQKALKEQEEKAIEKPLK SNAPANIKTPSLKAESPKNQEGKTQEK AKIEFDKLSKQKEIFQEALESFFKNKSY AEAKERLLWLEANSYRLYYVRYVLGEV AY

HP1198	397	GCACACTCTAAAGAAATGCTCACCATTAAATCCGATGATATTAGAGGCAGAGAACGCTTATAGGGCTATCGCTA AAGGTGAGCAAGTGGCGAGAGTGAATCCCTGAGACTTCTATGTTTGACTA	398	HTLKEMLTIKSDDIRGRNAYRAIAKGE QVGESEIPETFYVLT
HP1198	399	CTTTAGCCCAATGCGTTTAGCCATTGAAGCGGCTGAAGGCTCTGATTGAGCAACGCTAACATGCTTTTAAAGAA GCTTTTCTAACGCCAAAGACAAAGAGAGTGGAGTGAAATCGCGCTTAATTGGCTGAAGCAGAGATAAACTATCA AAATTTTAAACGCTAAATACCTCATTGATAAGGTGTCTCAATCCCAACCTGATTATTTCTACGCATAGCGAATCA GCCCTAGACTTGCTCAAGTTATTGAAGAAACCAAGATGAATGCAAGCGGCTGATGAGATCGCTCACTGCTCCTCAA TCAAGATGATGCTGAAGCTAAAGCAAGCGCTTTATGATTAGGAGCGTTGATGCAAGGATCAAGGACTTTAA AAACGCCACCTTTACAATCTGCAATATTTGCAGGACCATCGGAACCTGGAATGATGCTGCTAGGGCGCGCG ATGAAGAGCCCTTTTCCATGGAGGGGACACGCAAGAAATCGCCCACTATGACAAAATCATTCAAAATTTCC CTAATCTAATGAAGCCCTAAAGGCTTTAGAATTGAAGCCCACTATTGTTGAAACAAAGCGTTATGCTGAAGTGT TAAGCATGCAAAAAAATTTGCCTAAAGATTCCCTTTGATCCAAAAACGCTCAATGCTTGTAAACCCCATTAG AGAACCATCGTTGTAAGAGCCCTTAAATATTTATCCCAATCACAACCTTTGAATTCAGCCCAAGAAAGAAATCC AAGCCTTTGATTGCTTGTATTGCTATTCGCTCAAGAAAGCGCAATCATTCGCCCTAAACGCTTTTAAACGCGCTA AAGCCCTAGCGAGAAATTAATATGCTTATCGTTGGGCGCAATTAACCTAGGGGATTTTAAAAAT	400	LAQMLAIEAAEGSDLSNANMLFKEAF SNAKDKEASEIALNWAEAEINYNFN NAKYLIDKVVQSNPDYISTHSEALDLL KLLKKNQMNASAEIAHILLNQQDDDLKA KEQALYDLGALYARIKDFIKNAHLNQL YLQDHAELDKASVVRARDEKALFSME GNTQEKIAHYDKIQNFNPNNEALKALE LKAQLLFENKRYAEVLMSQKNLPKDS LIQKTLNVAKTPLENHRCEEALKYLSQ ITTFEFPKEEIQAFDCLYFASLKEKAQI IALNAFKTAKAPSEKLIWL YRLGRNYR LGDFKN
HP1198	401	GCGGAAACAAAAAAGACGAATACAAACCGCGGATCTTTGGTATCAAGGGATTTGAGAGAAATC CTTTTGTCTAATTAGAACAGCGGACATTAATCTTCTTACAAAGCGAACACATCAATCCCCCTTGTCCAG AAGCGATGCTAGCTTTAGGCAAGCGCACATGAAAAGAAAGAGATGTTTAGCGCTCTTTTACCTTGTATGATGATA TCAAGCGCTTTGGACTAAGGACATGTGATTTTAAATGCAATCGCATTTATACGCTTATACGCTTCAAAA CCATTTAAAGACCGAATTTATCTCTAATCTTATGAGTTAGGCAATTTATAGAAAATACCCCTAACAGCCGT TACGCCCTATGTAGATACATGCAATCAATCAATTTAGGCAATGAGCTCAATCGCGCATCGCGAATGT CTATAAAAAAGCCACAGCGCTGAGGCGTGAACGCTATTAGAAAGGATAGATGAGACTTTAGAAAAAGAGACTA AACCCAAACCATCGCACATGCTTGTGTTAATTTGATTGGTAGGATATTTCAAAACCATACACATTATAACA GAGAGATGAAAAATGACTGAAGAT	402	ANKKKKDEYNKPAIFWYQGILREILFA NLETAADNYSSLOQSEHINISPLVPEAML ALGQAHMKKEYVLASFYFDEYIKRFG TKDNVDYLTFLKLQSHYAFKNHSDQ EFISNSVSLGEFIEKYPNERYRYPVEY MQIKFILGNELNRAIANVYKRRHKPE GVKRYLERIDETLEKETKPKPSHMPWY VLIFDW
HP1198	403	CCTTTAAACCCCTTAAAGACGCTTTTACAGAGATTTCAATCATATAAGCAAAAGTTACTGATAGGGCAGCTAAAA GCGTTGCTATCAATCTAGCGTGATAAAGTGGCTAGTTAAACCGCGCTTACTACTGCAAGACAAATCTGTTA AAGTGGATTGGGATAAACCCATTTAATCAAGGACTCTTTAAAGGCAATAATACCTTTATAGGAGTTTGTCTTT ATTGGGGAAGCATTTTATGGACAGATTTTAAAGATAACGCTAAGCGGCGTGAAGACTTTATGCTAGTAAGGA GTTTGTGCTAATAACCGATACACCCCAAGCAATAACAGAAAGAGCGAAAGCTGCAATCGTATTAGAGAAATA GCGGATTTTATAGGGTTTGTCAAGCGCTTAACTCTTTAAAGACAAACCCGCAAGATCCTTTTACCCCAATGAAGA AACGAGCTTTTGGTTCGCTAATG	404	FKPFKDAFYRDFNHNEQKLLIGAASKG CIQSSADKLAQLKTRLLYV/QDKSVKVD WDKPIKDFKFGNNLYRFRFCFLGK HFMDFLKNNAKASVKDFMSSKEFVA KYRYTPKQNTERRAKKLQSYLENKRDFI GFVQALNSLKDNPQDPFLPNEETSFLV FAN
HP1198	405	GCTCGCTTTGAATGAGTTGAATCCGGCGAATGGTGGTGATGATTATGGGTGGCGTGTCTTCTCAATTAG TCCAGCACAGCGTTTATGGGAGCAAGAGGATTTTGAATCGCTTATTTGGCGAAGACAAACTGCTGTACCG GTAGAAAACCTTGCTATCGCTCGCTATGTGGCGCAAGCGATAGCGTCCAGCTAAAGACCGGCTAGGGAAG GGAGCTTTCTTAAATTAAGCTAAGTCAAGGACTAAGCTTTTAGAGATTGCTAGCAAGATCATTAATAGCGGCTG AACGCAATTTGATCTTTGGTAAAGATGGATGTGCAATTTAGCGGAGTTGGAAGTCTTTAATCGCATGCGGGGTT GAATACACCGC	406	LALNELNPGWVVDYGVGVFSQLV QHSVLGSKRDFLEIAYLGE:DKLLPVE NLHLIARYVAQSDSVPAKDRLGKGSFL KLKAKVTRTKLLEIASKIELAERNLILGK KMDVHLAELEVFESHAGFEYTS
HP1076	407	GTTTGAGCAGCAAAAAAGCCCTTTAAGGAATTTGAAAAATCGCTTAAATAAGATTTTGCCCAAGCAGAAAG CGATCAGTCTGTAGCAATCGGATTAATCCAGCATTTGCGGCTTTCTGCAAAAAATAAGCCTGTGGGAGCTTT TTATTCGTGGGCTAGTGGGTGGGAAACAGAAATGGCTAAGAAATGGCTTGAATTTGAATTTGCAATTTGA ACGCTTGACATGAGCGAATACAAAGAACCCCATAGCGTGGCAAACTCATCGGGAGTCTAGCGGTTATGTGGG TTTGAACAAGGGGTTATTGGTGAATCGGATTAAGAAACACCGCATTTGCTGCTTTTAGATGAGATAGAAAA GCCCATCTAACGTGATGATTGTTGCAAGTATGATGATAACGCCACTTTGAGCGATAATTTAGGCAATCAGGC GAGTTTAAAGCATGATTTGATTGACTTCAATGTGGGAGTAAGGATAAGGATACGCTAGGGTTTTTTAGCGC TAAAAACACCAAGTATGATAAAGCCGTTTGAACCCCTGAATACGCTCCAGGATTGATGCGATCGTGC CGTTTAAACGCGCTCAGTTTGAGGAT	408	LSSDKKALLRNLEKSLKNKIFAQAEAIS LVSNAIKIQHCGLSAKNKFVGSFLVGP SGVGKTELAKELALNHLHFERFDMSE YKEAHSVAKLIGSPGYVGFEEQGLLV NAKKHPHCLLLDEIEKAHSNVYDLL QVMDNATLSDNLGNQASFKHVILMTS NVGSKDKDTLGFFSAKNTKYDKAVKEL LTPELRSIDAIVPFNALSLIED

HP1076	409	AGCAAACCAATAAGGTGGTGTATGCTAAAGAAAGCGGCCATTTCAGCGCGGAGCTTAGGGATATTAACACCGCTAT GCATTTAGCCATGCTCTATCAAAAAATCACCAATAATCGTAATGATGTTCTATCAATAAGATTTTAGTGATGGCTAT GCGCAATGGGCGAGATTGATAAGCGGATTGAAATGCTGCACAAATCCGTAAAGAAAGAAAGACCATAGCCACAG ACAATGTGTAGGACCTTTGATTTGACTCAAAAGCGTTGGATAAGGCTTCCCATTTGTAATAAGTTTATAACCA AGTGCATGATGAAGACAGCCTAGAAAACTCATACGATCTATTTTGCATAATCGTAAAGAGAGGCTTGGATTT GTTGCAATCTCATATAGACAGGTATGTTGCTCAGAGCAATTGTCCAAAA	410	QTNKVYVYAKEAAISAAASLGDIKTAMHI MLYQKITNNRNDVSINKILVDGYAQMIR QIDKAIELLHKIRKEEKTIATDNVLGTL LTQKRLDKAFFLLNKFYNQVHDEDSL KLITYFLQNRKKEGLDLLQSHIDRYGI SEQLCQK
HP1076	411	GAGATTTGCCCAAAACTCCATCTTGATAAAAAGCTCTCCAAACAATACAGCCATGCATGCAACTTAACGCATCAA AACACTACACTTCTACCGGGTTAGAGAGCCTGATAAATGCACAAAGATTTTAAAAAATCCGCTCTCATGTCTCTATG ACTTAGCGCTAGGTTATTTGGTGAGTAAGATAAGCAATACGGCTTAAGGCTATAGAAATTTTAAACGCTTGGGCTA AAGAGCTTCAAGCGTGGATCTTATCAGAGCGAGGATAATCAATTTTACATGCTTATATGAACATGGCTTATTT GGTTGTCAAAAAGGCGTTTCTAGCCAGAAATATGAAGATTTTCAATGAAGCGGATGCGCCAGTATTTCTCAATCAGCTC TTAACACTAACCATGGGCGTGGGCAATCTTTTGTGATGTGAGTTCTGCGCTAGCGTTAGACGATAATGCCCTTTTG CACAAATAGCGCTAATCGGTG	412	DLPQKLHLDKKLSQTQPCMLNASKH YTSTGVREPDKCTKSFKKSALMSYDLA LGYLVSKNKQYGLKAIELNAWAKELQ SVDTYQSEDNINIFYMPYMNMA YWFK KAPPSPEYEDFIKRMRYQSQSALNTNH GAWGILFDVSSALALDDNALLHNSANR
HP1076	413	GCAAAAAATGTGCGAATACGCAAAACCCCTCGCATCAGAATCCACCGCTTCTATAACGCTGGCAAAATCTTAGACA CCCCCTAAAGCTAAAGAGCTTTTAAATTTGTTAATAGTAAGCTTAGCAACGCTTTTAAACTTTTAGGCAT AGAGATAAGACCAAAATTCGCTAGAGATTAAAGCCAATATTTAATTTTGTATACATTTCCCTTATTTTGA CTAAGGAGAAATATTATGCTTAATCGTATCATAGACACATGAACGCTCACCATGTTGAAGACATGAAGGTTTATTGA AAAAATTTGGCAAGTCCATCACGCTGAAATGTGCTTTTAAAGCGTGGATCTCAAGGCAATGAAGGTTTATTGA ACCACAACTCAACCTTAAGGATTGAATTTAACCAAGGTTAAAGACCCCAAGACTACAAATCGCATCATTTGAAT TGTTGCAAGCGTAGAAAAACCCCATGATTTAAAGGCGTGAAGAAAGTTAAGGCTTTTAAAGAAAGCTTTTGATT CTGTTTGTAGCGACCTTACACCTAATGGGCTATGCTGCTTATGCGCTTTAATGAGCGATGGCAACAAT ACTACATTTATGTGAGCGAAGTGGCTGAGCAATTTGCGGCTTTAAACAACCCCAATGTGGAAGTGATGTTT TAGAAGACGAGAGCAAGGCTAATCAGCTATTTGAGGAAACGCTTGCGTTATAAAACCAACGCTCGTTTATTGAAA GAGGGCGGAGTT	414	QKMEYAKTLASEFHRFYNAGKIDTP KAKELLKICLVLSLSNAFKLLGIEIKTI SARD
HP1076	415	CAAACTTAACGCAACCCCTTATTGAATGTTTGTAGAGTTAATCTGCGCAAGCCAAATATTATTCTAA AGAAGAAAGAGAAAGAAAGATGATCTTGAATTTTGTAGATATTTGAATATTCTTTTGAAGCTATCCAAAA CAACCAAGCCTGATTTTAAATAAAGACGAGCTTTAGGGGATTATCTAATCTTAAATTTAGATCTTTAAGAG AAGTGAGGGAAGACTTTTGAAGAGAGCGTTTAAAGATGATGAAGCGAGTTTGGAGCGTATGTGTTAGTGTCT AGCTGTAAGTATTTGAGAGCGTGTGTTGAAAAAGTTCAAGATGGCTAGATTTATCGCTAGGCTATTGCTTTGAGA GGCCATGTGCAAGATAACTA	416	NLNAPKPLFEFCVGVNLAkakYYSKKE EREKEKMILNFKIFEILFEAIQKPKP DFKNKDELLGDYPNLKNLDSLRVRED FLKRAFKNDEASLGAYVLVLLSCKYFE SVFEKVQEWLDFIARLIALRGHVHKIT
HP1076	417	CGAAGCCAAACGCTGATTGAAATGAAGACATTGAAAAAGATTATTATTAATAGGTTACGGATATTTTAC GGAATGTTGAATATTTAGATTATGAAAAAGGGGAGTGGCGGTGATCTTACGGCTTATACACCATCAAA TCAAAGTTTAAACGCGCAATGTGAAATGATCGAGTAAGATTGATTGGTGTGAATGTGGCTAGAGGGTTA TTAGAGCATGGAGGAAATCCATTGAGTGAATCGCTAACATTTTATTAGATCTTTAAATCGCTCTTGTAA AAAGATTCTAAGCAAGCCTTTTATTGATAGAGCGCTTTCTTAGAGCAATAAAAGTTTGGATTAGATGCGCTT TAAGCCTTAAGGAAATGATAGCCCAAGCATTGAATTTAGAAAGAAAGAAAGAAAGTGAATACAAATGCATA AGGCTAAGAGATTCAAAAATTTTGTCTTAAGATTTTAACTACGATACATAAAAGCACTATTTTATTGAAGGCT AAAGTTGTCTGAACCCATAGATAGATTACGCGCATAAAGTGTGTTTAAACGATTTTGAACAAATCCGCCAAC AAGCGTTTAAATCTGTGCGTGGGCGCTTGGGCGCTTGGCTAGACGCTTGTAT	418	QAKRCIENEDIEKKIYINRVTDFTELL NILDYEKGGEVAVYLTGLYTHQIKVLTQ ANVENDASKIDLVNVARGLLEAWREI HSDELA
HP1076	419	ATTTAAACGCTTGAAGATTCCAACACAGATTATTTAGACACCAAAACGCCCTTTAGCATGGACACTAAAGGCG ATGGGCGGATGGCTGAGCCTTTAGAAATCTTTTAAAGCCGCTCAACGCTCTCTAAAGACGCTTATTTGAAAA GAGAAATCATAGTATGGGCGCGAGTATAGAAAGATTGACAGCGTTGCAACGATTAGCAATCTTTCTAGCGG GATTCAAGCGAGCGCTTTAGCTTTGGCTTATTTTAAAGGAGCCAAAGTTACTTTGATCGCATCAAACTTCCCCAC CCCCCTGCTTAAAGAAATCACAAGCGTTTATGTTAGCGACACGCTTCTTATGAAACGCGCTGAATAGTCCGCTA ACAACTTGCAAAAACATGCCCTTAAACCCCTGCTCTTCAATTTAGCGGCAATTATGTGCTTAAACTCTTT TAATTATAGCTTAAAAAAGCGAGATAGGCGAAACCCCTAAAC	420	LKRLKDSNHILDTKNALLACDTKGDGIE MAEPLEILFKAAQTLLKDAYFENREVIV MGASIEKIDSVRTISNLSSGIQASALA LALYFKGAKVTLIASNFPTPLPEITSV VSDTASYENALNSAANNLOKHAKPLIN FNLAASDYVPKTSFNYKLKSEIGETL N

PCT/EP01/1548

HP1076	421	ATCCGGGATTGATTTATCGCGCCATTAAACACGCCCTGTTTATCGAGCGCTGATGGGATTGTGGATTGTGGATTGTGAAGA CCAATCTAATGTGGGTATGGGAACCTTGGTGGCAATGAACATGCGTTTGGTTTGTAGCTCCATTACACGCGCATTAG ATCATGTCAATGTGAGCCCAAGCTTATCCAAAGGCGAGTTGATTGGCTATAGCGGGAAGCGGTAATAGC GGCGCGAAATTTGCAATTAAGTGGCTTTTGGTAATTTAGACGCGCAAAATTTCTGGCATGGGATT GGATCATTTTCAAGCGCTTTAGAAGAAATAAATTTATTGAATGAAGAAATTTGGTTTGGTTTGAAGACATTGTC CAGCTCCAAGAGCATGTGGATAAGACGCACTCATAAGCCAGTAAGGATTTAGTGTTTTAGACAGCGGTTTGTAT GTGATGTTACGGACTCTAAAGGGAGTGGTATATTAATGTTTCATATCTTATCCGTCAAATGGCCTGTATGCGCTT	422	SGIDFIAPLNTPVYASADGIVDFVKTNS NVGYGNLVRIEHAFGFSYIYTHLDHVN VQPKSFIQKGLIGYSGKSGNSGGEKL HYEVRFGLKILDQAQKFLAWDLDFHQA LEENKFIEWKNLFWVLE:DIVQLQEHVD KDALISQ
HP1076	423	CCCCAGACTTAAAGCACCTGCCGTTTAGGAAACAATGAGGTGATGAACACTTTGAGCTTTCTAAAAAATTTGGGTA AGAACGGTGGGATCTTTCTCTGCGCAAAAGATTTACTTTTGTATGCCCTACAGAAATCAATGCGTTTGACAAA GAGTGAAGACTTCCAAAGAAAGCTTTAATGTGATTGGCGTCTATTGACAGCGCAACAAGTGCAATTTGTCATGG AAAAACACCCCTGTAGAAAGGCGGTATTGGTCAAGTAATTTCCCTATGGTGGCTGATATTACCAAAAGCATTTCT AGAGACTATGATGTGTTGTTGAAGAGCGGTGCTTTGAGAGGAGCTTTTGTGACAAAACATGAAGTAAGG CATGCGGTGATCAATGACTTACCATTAGGCAGAAATGCAGATGAATGCTTCGATGGTGGAGCTCTCTTACACTT TGAAGAACATGTTGAAGTTTGGCCAGCAGGTTGGAGAAAGGCGATAAGGCAATGAAGCAACTACCAAGCGCTT GCAGAGTATCTCAAGAAATTCATTAAAGCTTTAATCGGCTTAATCTTTAACCAAGAGAGTCTTCTTGGTTAA TCCTTTCTTTTGAATCTCGCTTAGTTTAAAGTTTTCGTATCGTTTATCTTTTATCATTTTGAATTAATTTTTTA ATAAGGGGTTTTATGAATGCATCAAGCGTATTATTAGTGGGGTAATGCTTTAGGTTTGTAAACCTTTTGA CGCCAAACACCAAGAGAAAGAAACCAACCAAAATCACCTGAGCTTAAAGTGGCGCTAACCCGTTCCG CATGCGCAATCTTGCAATCAGTGTGACGATTTGAAGAGAAAGGATCAAAATAGTGTATCTTTTACGGAT TATGTGTTGCTTAATTTAGCGCTCAATGACGGCTCTTTGGATGCGAATTAATCCAGCACCGCCCTTATTTGGATCGG TTTAATTTGG	424	PDFKAPAVLGNNEVDEHFEELSKNLGK NGAILFFWPKDFTFVCPTEIIAFDKRVK DFQEKGFNVIGVDSIDSEQVHFAWKNT VEKGGQVTFPMVADITKSISRDYDVL FEEAIALRGAFILIDKNMKVRHAVINDLP LGRNADEMLRMVDALLHFEHGEVCP AGWRKGDGKMGKATHCIGVAEYLKENS! KL
HP1196	425	GCAAAAAGACGCTTGGGGTTCATCTATGAGATCAGCGAGTTCATGAAAGCCCTATACCGCATTCCTAAAAAACA GACCGATACGCTATTATGAGGTATCTCCCTCTAGTATTGGCCAGCATTTAAACGACTGCCCTTTATGTCAAA TACCCTGATTTGACGCTTTGAAAAGCTTTTGGTGTCTATTATTACCAACTGGATTGAGGAGGACGATCAGC CGCATCAAGCAACCAAGTATCAACATTATCAAAACGTTAAAGCAATGAAGCGTTGAAACCATCAAGAGCTTATA TTGAATAGCATCGACTCTTATAACACCTTTGATCAATACCTCTATACTTATGGATAGCTCTTCTGTTTATCATAGCA AATGGTGGCTCTGCTTAGCCCTAGCTAATATTATTCATGGCAGATGAAGAGAAACCCCATTTTATCGCTATGGATG CCGAAACCCCAAGTGAGCATATTTTGCACAAACGCCCAAGAGGAGTCAATGAACCGGATTTTGACAAAGA AAAAAGAGAAAGTGGTAAATAATATCGCAATTTAACCTTTTAAAGCGTAAAGAAACCGCATGCTTTAAACGG GGATTTTATGATAAAAGAAATAATTTATGGAGGCAAGACACGAGCAAGTATTAGCTGTTATGACATCACTAAAGA ATTGTATAGCAATTATAGGAAGTGAATGAGAAAGTCCCTCCAGAGCGATACAAATCTTTGTATAACACTATCACGCC TGTTTTACACATAGAGGGCAAGAGATGATTTTGAAGATGATTTTGTATGATGATTAAGATTGCCAAGCA TGAGTTTGGAGAGCATGAACAAAGGAGCGATCAACCGCTTTTAAAGATTGCAATACCATGATGAAGAAAGCGTTA GAAGACAGCACTTTGAAGCTTTCAAAAGCTTTCAACAGCTTTTAAAGGCGAAGTGAATTTAGTGGATCAAA CCAAACACCTTTATTGAGATTGAGCAGCAATTTCAAGGCGTCTTCCATGCGCCATCGCATCAAGGCGGAGAGTT TTAAAGTGGCGATAGCATTAAAGCGTTTAAACGCAAGTCAACCGCACGAAAGGCTTATTATTAGAGCTGAGC CGCACCAACCTTAAATGCTTGAAGCTTTTGTGGAATTTGAAGTCCCTGAAATTAAGACAAAGAAATGAAATCATC CATTGTGCGGCAATCCAGGCAACAGAGCGAAAGTGAAGCTTTTTCCTAATACCGTAGGATTGACCCCATAGCGG ATCAAGCTATGCCAACTCATCGCGCAACCATCTCGCATGTGCTTAATGGCGGATCGCTGTTGGTGAAGCGGATT CTTCTAGGCACTGGTTTAAACTACATCTTCTAACCTAAACCCCAAGATTTAAAGAGCGCCCTTATTGTCCGT CATTGATTTAACGCTTCTTCTTCTACCCCAAAACGATGCGAATCTCTCTAGCCACCATAGAGATGACTTATCAA AACCCCATGTTTGGCATGTTGGGAAATTTGAAATGAAGGCTTAAACCGCATATTGAGTAAATCCCTAGTTTTT TATGCGTTTTTGAAGAGCTTAAAGAGATGCTTGTCTTTAAAGAGCATGACAGCTTGTGGAATTAATAAATTATTGCA GCTCTTCAAACTCTTTGAAAACGCGCTTTTAGCGTGTCTATACAATAAGGTACTCTGTGAAAAAAGTCCCAACCGC	426	KKDACGFIYEISEFMKAYTALLKKQDRY VYLLRYLPTRYWASILTALYVKYPOFD ALKKLLVSYYYQTWAGGTITRIKQTSIN IINKVKSINKSVETIKELILNSIDSYNTFDQ YLYNLWDSSSVYHSKWVRPVLALANY FMADEEKPHFIAMDAETQVEHILPQTP KRGSQWNADFDKEKREEWVNNIANILT LLKRKNAHALNGDFDEKRIKYGKDT SKVISCYDITKELYSNYRKWNEKSQLE RYKSLYNTITPVLHIEGQEDDFEDFDL E
HP1196	427	TGAGTTTGGAGAGCATGAACAAAGGAGCGATCAACCGCTTTTAAAGATTGCAATACCATGATGAAGAAAGCGTTA GAAGACAGCACTTTGAAGCTTTCAAAAGCTTTCAACAGCTTTTAAAGGCGAAGTGAATTTAGTGGATCACA CCAAACACCTTTATTGAGATTGAGCAGCAATTTCAAGGCGTCTTCCATGCGCCATCGCATCAAGGCGGAGAGTT TTAAAGTGGCGATAGCATTAAAGCGTTTAAACGCAAGTCAACCGCACGAAAGGCTTATTATTAGAGCTGAGC CGCACCAACCTTAAATGCTTGAAGCTTTTGTGGAATTTGAAGTCCCTGAAATTAAGACAAAGAAATGAAATCATC CATTGTGCGGCAATCCAGGCAACAGAGCGAAAGTGAAGCTTTTTCCTAATACCGTAGGATTGACCCCATAGCGG ATCAAGCTATGCCAACTCATCGCGCAACCATCTCGCATGTGCTTAATGGCGGATCGCTGTTGGTGAAGCGGATT CTTCTAGGCACTGGTTTAAACTACATCTTCTAACCTAAACCCCAAGATTTAAAGAGCGCCCTTATTGTCCGT CATTGATTTAACGCTTCTTCTTCTACCCCAAAACGATGCGAATCTCTCTAGCCACCATAGAGATGACTTATCAA AACCCCATGTTTGGCATGTTGGGAAATTTGAAATGAAGGCTTAAACCGCATATTGAGTAAATCCCTAGTTTTT TATGCGTTTTTGAAGAGCTTAAAGAGATGCTTGTCTTTAAAGAGCATGACAGCTTGTGGAATTAATAAATTATTGCA GCTCTTCAAACTCTTTGAAAACGCGCTTTTAGCGTGTCTATACAATAAGGTACTCTGTGAAAAAAGTCCCAACCGC	428	SLESMKQGAIRLFKDI.QYQLEKALE SHFEAFQKRLNSVLMGQVILVDHNQNT FIEIEQQFGQVLSMRHRIKGESFKVGD SIKAVLTQVTRTKKGLLLELSRTTPKML EALLELEVEPEIKDKEIEIHCAIPGNRA KVSFFSHNARIDPIG
HP1529	429	ATCAAGCTATGCCAACTCATCGCGCAACCATCTCGCATGTGCTTAATGGCGGATCGCTGTTGGTGAAGCGGATT CTTCTAGGCACTGGTTTAAACTACATCTTCTAACCTAAACCCCAAGATTTAAAGAGCGCCCTTATTGTCCGT CATTGATTTAACGCTTCTTCTTCTACCCCAAAACGATGCGAATCTCTCTAGCCACCATAGAGATGACTTATCAA AACCCCATGTTTGGCATGTTGGGAAATTTGAAATGAAGGCTTAAACCGCATATTGAGTAAATCCCTAGTTTTT TATGCGTTTTTGAAGAGCTTAAAGAGATGCTTGTCTTTAAAGAGCATGACAGCTTGTGGAATTAATAAATTATTGCA GCTCTTCAAACTCTTTGAAAACGCGCTTTTAGCGTGTCTATACAATAAGGTACTCTGTGAAAAAAGTCCCAACCGC	430	SSYAKLIAQTISHVLNGGSLVSADSSR HWFLNYLSNLNPKDLKERPLLSVIDFN ASSFYPKNDANLSLAT EMTYQNPMFW HVGKIENEGKTILLSK.PSFLWLFEELK EDCLLKEHDSLLDYKI.LQLFKLFENAL FSVLYNKVTL

HP0071	431	ATGGCGGATTGCGTGGCGGAATTTGTTGCATAAAATTCAGGGATCACGATAGATATTGAGGGGGTAGCACCGA GTGCGCGTTGATTGAAAGGCAAGATTAGGACITTAATCTCGCTTGATGTTGGACGATTCGATTAAAGAAATGTT TTTAGACAAAGACTTAGAGGTCAAATTTGGTAAAGCCTTTATCCAAAAGAAAGTCTCTAACTGCCCTTTAAACACAA AAAGCCTTTGGGTGGGGGACGATCAGAGCGTTGAGTAAGGTTGATGAAACGCTTTGTACCTATTGATT CTTTGCATGCTATGAAATAGATGCACATAAAATTTAGCGTTCAATTGAAAAATCGTCATGCTCAAGAAGATCAATT ACGGCTTTAGGGGTGAATGAAGCGTTTGGATAGCATCAGGAGCGGGCGTTGATTTATCAGTCGTTTGGAG CATTTAAACACTTCTTTAATGATCACTAGTGGGTGGGTGAGAGAGCGGTGTTTGGCGGATTTATGCGCCA TCATTACCATAAATCCCGCCCAATATCAACCCCTCTCTCATCTTTAAAGATCGCTTTTGGCCCATGAAAGCAC AGCCAAAGGTCAAAAGAAATCGGTGAATTTGTTGAAGCCTTATCGCCTTTGCATAAAATAGATGAAATAACCTT TTCCATTAAAGATTGCGGGGAATTAGCGAGCATGGTAAGATTTTAAGCGTCTATTAGCCCAAGCACAGCGC GTATTTTATTTAAACGCTTTGAGTTATGGCTTAGCCACGAGATAGCGCATTTGCTTATTAGCCCAATTTCAGC CATAAATAATC	432	GGIACANLLHKNSGITIDIGGGSTECAL EKGIKIDLSLDVGTIRIKEMFLDKOLEV KLAKAFIQKEVSKLPFKHKNFVGGT RALSKVLMKRCYPIIDSLHGYEIDAHK NLAFIEKIVMLKEDQLRLLGVNEERLDS IRSGALISVLEHLKTSMTSGVGV EGVFLSDLRRHHYHKFPNINPSLSLK DRFLPHEKHSQKVKKECVKLFEALSPL HKIDEKYLFLHKLKAGELASMGKILSVYLA HKHSAYFILNALSYGFSHQDRAIICLLA QFSHKKI
HP0071	433	TTTTGAAACGCAAAAGCTGAATGCAGTTTATGTTTATTAATCAATAAGGATTTAGCCACGCTGGGTCAAAATAAA GAGTTGCTAGAAACCTTTAAATACGAAGCGGAGCGGTATTTTAGACCAAGAAATAAATCCTGTATGCGGCGT TAAAGAAGATGATGTCATTTATTGAGAGAGAGCGGTGTTAGCGTTCGACCTTAAATAAAGTCTGCTTTTAAAG CGTTAAAGTGGCGTTTATCTGTTGAGTACATCTAAAGATAACGCGCTTTAGAAAACCTTGAAGCGCTGTTTT GGCTTGAATTAGGTTGATGAATACGACACTTTTAAATCCAAACAAAGAAAGCGTTTAAAGAAAGCGCATTTGT CGCTTAGAATGACAGAAAGCTTGAATATCGTTAAAGATCTAGTCAATACCCCGCTATGATTGGCACTCCGTTTA TATGCTGAAGTGGCGCAAAAGTGGCTAAAGAAACCTTGAAGAAATCCATGTTATGATGAAATAATTTTAGAAGA AAAGAAATGAACGCTTTTAGCGGTCAATAAGCCTCTCTTAGCGTCAATCCTCCTGCTGATCCATTTAGTCTA TAAGCCTAAAGCGGAAGAAATAATCGCTTTAGTGGTAAGGCTTACCTTATGATTTGGGGTTGAGCTTGA AACCAGCGGATTACATGTTACTATGAAGCGGATAAAGCGGTGCTGCGGTGATTGGCTTTTAAAGCGCATTA GCCAACTAGCGGTGAGGCTGAAGTGCATGGCATTATTGGGGCTACAGAAACATGATAGGCCCGCGCTTATA AACCAGATGATATTTGATCTCCAAAGAAAGCAAGAGCATAGAGTCCGTAATACCGACGCTGAGGGCGCTTTGGTT TTAGCGGATTGTTG	434	FENAKAECSLVFIINKDFSHAWKNKEL LETFKYEGEGVFLDQENKILYAGVKED DVHLLRESACLAVRTLKLAFKSVKVG VYTCGAHSDKNALLENLKLFLGLKL LYEYDTFSNKKESVLKEAIVALELHKP CEKTCANSLEKSAKEALKYAEIMTESL NIVKDLVNTPPMIGTPVYMAEVAQKVA KENHLEIHVHDEKFLKKEKMNNAFLAVN KASLSVNPRLIHLVYKPKKAKKIALV KGKLTDCGGLSLKPADYMTVMKADK GGGSVIGLLNALAKLGVAEVHGIIGA TENMIGPAAYKPDILISKEGKSIEVRN TDAEGRVLADCLSYAQDLNPDVIVDF ATLTGACVVLGEGFTSAIMGHNEELKN LFETSGLESGELLAKLPFNRLHKLKIES KIADVNCNISRYYGGAITAGLFLNEFIRD EFKDKWLHIDIAGPAYVEKEWVDVNSFG ASGAGVRACTAFVEELKKA
HP0071	435	TGATGTTATTAAAAAGTTACGACCCCAAGGGTGGCATTGAAATCTTAAGGACTTTAATTGATTTACGCCCAAAAT GAAACGCCCTGAATTTAGCGGCCAAAGCCATAAGGGGCAATACAGAAAAGCGGCGGCTTATATTGTCATC CTATTTGCGTGGCAAGCTTGTAGCGTTTGTGGGGCGATGAGCGGATGGTGTGCTGCGCTTTGTCATGATGT GGTGAAGACACGCTTGTAGATTGAACGATTGAGCAAGAAATTTGGCAAGATGGCTAATTTAGTGGATGCGC TCACTAAATCACTGAAATCAGGAAAGAAAGAAATAGCGGTGAGCTCTCAAGATCCAGATGGTGGTTTCAAGCGCTC ACTTTCAGAAAGATTTTAATTAGCGCGATACAGATCCAGAGCGCTTAGTGTAAAGATTAGCGACAGGTTGCACAAC ATGCTCACCTTAGACGCTTGCCTCATGACAAGCAAGTGCCTATTCTAAAGAGACTAGCGGTGATGCCCTAT AGCGAGCGGATTGGCATGTCTTCAATCAAAATGAATTAGAGACAAAGAGCTTTTATTATATTATCAGAAAGATA TAAATATCAAGGAATATTGCACAAACAAAGAGCTTTACTCTTAAAGCTCAAGCTTTTGCAGCAAGTTAGAA AAAACTTTTGTAGTGGGTTAGCCATTGCGATTTTAACTGTTACAGGGTGAACCGCTTATTTCTATCTATC TTAAGATGCAACGAAAGGCGGTTAATATTGATGAAATTTGGACTTGTAGCCATTAGGATTATTGAAACCC CGATTGATTGCTATAAAGTTTAGGGATTATCCATTGAATTTCAACCCATTGCTCTCTGTTTAAAGATTACATCGC TTTGCCCAAGAAATGGCTATAAG	436	DVIKVVTPKGGIEILRLIDFTPKIENAL NLAASHKQYRKSGEPYVHPICVAS LVAFCGGDEAMVCAALLHDVVEDTPC KIETIEQEFQDQVANLVDALTKITEIRKE ELGVSSQDPRMVVSALTFRKILISAIQD PRALVVKISDRLHNMLTLDALPHDKQV RISKETLAVYAPIASRLGMSSIKNELED KSFYIYPEEYKNIKEYLHKNKQSLK LNAFASKLEKLLFDSGFSHDFKLVR VKRPYSYLLKMQRKGAVNIDEILOLAIR ILLKNPIDCYKVLGIHLNFKPIVSRFKDY IALPKENGYK

HP0071	437	TTTTGCTAGCGATTGTGTTGAGCAATTTCTACTTTTATTGCACAAGGTAAGATTAAGGTCAGTCTCCCTAACGCTAAAA TGCGGAAAAATCCAGCCCAACGATCAAAAAGTGGTGCTATCTCTGTAGATGAGCATGACAATATTTTCGTAGATG ACAAACCGATGAATTTAGAAAGCTTTGAGCGCTGTAGTCAACAACAACAGACCCCTAAACCCCTTATAGACTTAAAAAGCG ACAAAAGCTCTCGTTTTGAAACTTTTATCAGCAATATGGATATTTTAAAGAGCATAATCATGAAAAATTTCTCCATCTCC ACGCAAGCTCAGTAAAGTTTCAACGAGTGTAGCTTTTAAATCTCTTTGCCCTATACGCTATAGGGTTTGCGCTATTTT TACTGCGGGAAGACGCCCCAGAGCCTTTAGCGCAAGCCGGGACCCTAAGGTTACCATGAGTTTAGCCAGCATCA ACACTAATTCCAATACAAAGACTAATGCTGAGTCGGCTAAACCCCAAGAAAGAGCCTAAAGAAAAACCCCAAGAAAGAA GAGCCAAAAAAGAAACCCCAAAAGGAGTTACAAAGCCTAAACCTAAGCCTAAACCCCAAGCCCAAGCCCAAAACC AAAACCTAAGCCTGAACCCCAACCTGAACCAAAACCCGAGCCTAAGCCTAAGCTTAAGTTGAAGAGTTTAAAAAAG AAGAGCCTAAAGAAGAGCCCAAAAGAAAGAGCTAAAGAGGAAGCTAAAGAAAAAGCGCTCCTAAACAAGTAACA ACTAAGGATATAGTCAAGAAAAAGACAAAGCAAGAAATCCAACAAAACCTCTGAGGGGGCCACTTCTGAAGCTCA AGCTTATAACCCAGGGGTGAGCAACGAATTTTAAATGA	438	LLAIVLSISTFIAQGGKIKVSLPNAKNAEK SQPNQKQWVVISVDEHDNIFVDDKPMNG LEALSAVVWQTDPKTLIDLKSDKSSRFE TFISIMDILKEHNHENF SISTQAQ
HP0071	439	AAGACAGCAAAAAGACGCTTGCGGGTTCATCTATGAGATCAGCGAGTTCATGAAAGCCTATACCGCATTGCTAAAA AAACAAGACCGATACGTCTATTTATTGAGGTATCTCCCTCTAGGTATTGGCCAGCATTTTAAACGACTGCCCTTTAT GTCAAATACCCCTGATTTTGACGCTTTGAAAAAGCTTTTGGTGCTTATTATTACCAAACCTGGATTGCAGGAGGCACG ATCACGCGCATCAAGCAAAACAGTATCAACATTATCAAAAACGTTAAAGCAATAAGAGCGTTGAAACCATCAAAAGAG CTTATATTGAATAGCATCGACTCTTATAACACCTTTGATCAATACCTCTATAACTTATGGGATAGCTCTTCTGTTTATCA TAGCAATGGTGCTGCTCTTAGCCCTAGCTAATTATTTTCATGGCAGATGAAGAGAAACCCCATTTTATCGCTAT GGATGCCGAAACCCCAAGTGAGCATAATTTGCCACAAACGCCCAAAAGAGCGAGTCAATGGAACGCGGATTTTGAC AAAGAAAAAGAGAAGAAATGGGTAAATAATATCGGAATTTAACCCCTTTTAAAGCGTAAAAAAGAACGCGCATGCTTTA AACGGGATTTTGATGAAAAAAGAAAAATTTATGGAGGCAAGACACGAGCAAAAGTGATTAGCTGTTATGACATCACT AAAGAAATTGTATAGCAATTATAGGAAGTGGAAATGAGAAGTCCCTCCAAGAGCGATACAAATCTTTGTATAAACACTATC ACGCTGTTTTACACATAGAGGGGCAAGAAAGATGATTTTGAAGATGATTTTGATCTAGAAATGATTAAAGATTGCCAAG CATCAAAA	440	DSKKDACGFIYEISEFIMKAYTALLKKQD RYVYLLRYLPSPRYWA\$ILTTALYVKYPD FDALKKLLV\$YYYQTWIAGGTITRIKQT SINIKNVKSNSKVETIKELILNSIDSYNT FDQYL\$YNLWDSSSVYH\$K\$WVRPVLAL ANYFMADEEKPHFIAMDAETQVEHILP QTPKRG\$QWNADFKEKREEWVNNIA NLTLKRKKN\$HALNGJFDEKRKIYGG KOT\$KVISCYDITKELY\$NYRKWNEKS LQERYKSLYNTITPVLHIEGQEDDFEDD FDLE
HP0316	441	ACCCCTAGAGAAAGCCTGGATTTAAAGAGTTTATCGCTCTTTTAAACCTTTTGGCCAAAGAAAGAGATACTATT GCTTTAGAAAACGATCTCAAGCAACCTTCACTTATTTAAACGAAGTGATCGCATGGTTTGCCACCCCTAAAAAGC GTGAAAGAAAGCGATCTTATTATCATCAAACTCACCAATTAGGACGCTCCATTTAGATGAAATTTTGAGATTGTCA AACGATTGCACTACATTGTGCTTTTACAAAACGCTTTTAAACCTTTCACGCAATTTTAAATTTTATGAACGCTTAAACGC TATTGCTCTGCCCTTTTGAATGAAAGTTTGAACCGCTTAAACCAAGAGAGCGTAAATCATTCACCATTAACGCCGCTC TACCTAGACGCTTTGAATGAAAGTTTGAACCGCTTAAACCAAGAGAGCGTAAATCATTCACCATTAACGCCGCTC TAAAGAGCTTGCCCTTATTAGTGATACGCAAGCCATCTTAAAGCATGGTTATGAATGCCTTTATTGAAAAGCGG GTTTTCTGGCGGATTAAAGCGTTGTCTAGAAAGGAGCGCTAATGGCTATTTCTATCTTTTGCCCTGAAAGCGCCC AAAAATCGCCCAAAAATCGCCCAAAATGGTAATGAATAGATTGTGCAATTTGAAATGTGCCAAACTCTAAGCC ATAGCTTGCAAAACACCTTTTATTTTAAATTCCTTTTAAAGAAATTTGATTTTACACAGCTTGCAAGCCCGGCTT AATTCGCTAAAGCCTACAAATTTAGAAATTTGTATGCCAAGCTTTACACAAAAAATAATGATTTTAGAAAACTTTTACAA CCCCATTTTAAAGAGGCCAAAGCCCTTAAATTTGAAGTTTGAAGAAATCCATGCTTGCTGTTACCGGCGTGAATGCGG GCGGGAAAACCATGCTCTTAAATCGCTTTTAAAGCGCGGCTTTTAAAGCAAGCATCTCATTCCTATGAAAATCAACG CCCAT	442	PLEESLDLKEFIALFKTI:FAKERDTIALE NDLKQTFITYLNEVDAIGLPTPKSVKES DLIIKLT\$KLGTLHLDEIFEIVKRLHYI\$VL QNAFKTFTHLKFHERL\$NAIVLPPFFNDL IALFDDEGKIKQGANATLDALNESL\$RL K\$ESVKIHHYARS\$KELAPYLVDTQ\$HL KHGYECLLLKSGFSGAIKGVV\$LERSAN GYFYLLPESAQKIAQKIAQIGNEIDCCIV EMCQTL\$HSLQKHLFLKFLKFEFDL DSLQARL\$FAKAYNLE:FVMP\$FTQKX MILENF\$HPILKEPKPL\$NLKFEK\$MLAV TGVNAGGKTMLL\$KSLLSAAFL\$KHLIP MKINAH\$SIIPYFKEIHAI\$NDPQNSANNI \$TFAGRMKQF\$ALL\$KENMLLGVDEIE LGTADAD
HP0316	443	AAAATACAGCAAAAACAGCTTTTAAATTTAATCCATCAATTAGAGCGGAAAAATCAAAAAGATGCAAAATGATAGAATT TCTTTTAAAGAAAAAATGGCTAAAGAATTGAAAAAAGGGATCAAAACTTTAAGGATAAAATAGACGCGTTAAATGAA CTCTTGCAAAAATCAGTCAAGCTTTTGATGATAAAAG	444	KYSKKQLFNL\$HQLERKIKKMQNDRISF KEKMAKELEKRDQNF\$DKIDALNELLO KISQAFDDK
HP0316	445	TAGGAAATTCAGGCCCCAACCGAGGGCGAAATTTGGGGGCTTGGGATCACGGTGGCGATGGCGGTTTITA ACCGTTATTGCCCTTTAGAAAGGCACCTCCAGCTTACAAGGCTGGGTTAAGTCAGGCGGATAACATTTTAAAAATCAAT AACGAAAGCACGCTGAGCATGAGCATTGAT	446	KEFQAQTEGEFGGLGI\$VGMRDGVLT VIAPLEGTPAYKAGVKS\$GDNILKINNES T\$MSMSID

HP1448	447	AGGGCTTTGGGGCTTTAGTAATCAACACGCCCTACTAGCGAGGGGATTTCTGGCGCCATTAAAAAAGTAAAGAGTT AGCCGAAAGTATCCCTGATAGCTATTTGCCCTTACAAATTTGAAACCCCTGATAATCCCGCCGCTTACTACACACCCCT AGCCCTGAGATTGTCCAAGAAATAGGCACAAACCTTACGAGCTTTGTAGCCGGATAGGAGTGGTGGCCTTTT GCGGCACGGCTAGGTATTTGAAAGAACGCTCCCTCGGATTCGCTTGAATGGGTGGAGCCGGAGGTTCTATTT TGAATGGGGTGAGCCTGGCCCTCATGAGATTGAGGGCATTTGGCGTGGAGTTCATCCCTCCTTTTTTTTGAACAACTTG GATATTGATGGCTTTGAAACGATCTCAGATGAAGAGGGT	448	RALGALVINTPTSEGISGAIKKSKELAE SIPDSYLPLOFENPDNPAAAYHTLAPEI VQELGTNLTSFVAGIGSGGTAGTARY LKERIPAIRLIGVEPEGSILNGGEPGP EIEGIGVEFIPFFENLDIDGFETISDEE G
HP0431	449	GGGTAGAGCAAGTGTAGCCGATCTCAAAACTTCTCAAAGGAGCAATTGGCTCAACAGCTCAAAAAAATGAAGAT TTCAATACTGGAAAAAATTCTGAACCTATACCAATCCGTTAAGAAATAGTAAATAAAACCCCTAGTCGGTAATGGGTTAT CTGGAATAGAGGCCACAGCTCTGCCCAAAATTTTCGGATATCAAGAAAGAAATGAAATGAGAAATTTAAAAATTTCA ATAACAATAAATGAGCTCAAAACACAGACAGAACCCCATTTATGCTAAAGTTAATAAAAGAAAAACAGGACAAAGTAG CTAGCCCTGAAGAACCCCATTTATCTCAAGTTGCTAAAGGTAATGCAAAATTTGACCGACTCAATCAATAGCAAA GTGGTTGGGTGGTGTAGGCAAGCAGCGGGCTTCCCTTTGAAAGGCATGATAAGTTGATGATCTCAGTAAGGT AGGGCTTTCAGCTAGCCCTGAACCCATTTACGCTACGATGATGATCTCGCGGACCTTTCCCTTTGAAAAAGGCATG ATAAAGTTGATGATCTCAGTAAGGTAGGGGATCAAGGAATCAAGAAATTTGGCTCAGAAATTTGACAAATCTCAATCAAG CGGTATCAGAACTAAAGCAGGTTTTTTTGGCAACCTAGAGCAACGATAGCAAGCTCAAGAAATTTCTACAAAAAAG AATGTTATGAATCTATATGTTGAAAGTGCAAAAGTGCCCTGCTAGTTTGCAGCGAAATTTGGCAAAATTTATGCTATTA ACAGCCACACAGCATTAATAGCAATATCCAAATGAGCAATCAATGAAAAAGCGGATGCTAAACGCAAAA AACCTGAGTGGCTTAAGCTCGTGAATGATAAGATAGTGGGAAAGCTTTCTTTGTCAGAGTATGA TAAATTTGGCTTCAACCAGAAATATGAAAGATTATTCGTTCAAGTTTTCCACCAAGTTGAACAAATGCTGTA AAAGACATTAAGTC	450	VEQVLADLKNFSKEQLAQQAQKNEDF NTGKNSELYQSVKNSVNKTLVGNGLS GIEATALAKNFSDIKKELNEKFNFNNN NNGLNKSTIEPIYAKVNKKKTGQVASPE EPIYQVAKKVNKIDRLNQIASGLGGV GQAAGFPLKRHDKVDLSDKVLSP EPIYATIDDLGGPFPLKRHDKVDLSDK GRSRNQELAQKIDNLNQAVSEAKAGF FGNLEQTDKLDKSTKKNVNNLYVESA KKVPASLSAKLDNYAINSHTRINSNIQ GAINKATGMLTQKNPEWLKLVNDKIV AHNVGSVSLSEYDKIGFNQKNMKDYS DSFKFTKLNNAVVDIKSGFTHFLANAF STGYCYCLARENAEHGIKNVNTKGGFQ KS
HP0431	451	CCTTTTAAACCATGCTAAAAAACTCAAAGCTTGAATGGGTGGAGATTGTAGGGTTGGAGCATTTGGATAAAGTGAT TTATTTAGATCAAGCCCTCATAGGCAAAACCCACGAAGCAACCTGCCACTACACGGGAGTGATGGATGAATCA GGATTTTATTTGCCGAGCAAAAGAGCTAAATTTTAGGCTATAGTGGAGCCGCTTTTAGCTTTAATGTTAAAGGAG GGCGGTGCGAGAAATGCCAAGGCGATGGGACATTAATAAGAAATGCACITTTTGCTGATGTTAGTCCCAATGC GATAGCTGTAAGGGCGCTAAATACACCCCAACTTTAGAAATCAAGGTGAAGGCAATCCATTGCCGATGTGTT GAACATGAGCGTGAAGAGGCTTATGAATTTTGTCTAAATCCCTAAATCGCCGTGAAGTTAAACGCTTATGGA TGTGGGCTTAGGCTATATCACTTAGGCAAAACGCTACGACTTAAGTGGGGGAGGCTCAAGGATCAAAATAG CTAAAGAAATTGAGTAAAGACACAGGCAAAACCCCTTATATTTAGATGAGCCTACTACCGGTTTGCATTTTGAAG ACGTGAATCATCTTTACAGCTCTTGCTTCTTAGTGGCGTTAGGCAATTTCTAGTGTGATTGAGCATAAATTTAGA CATTTATCAAAACGCTGACTACATATAGACATGGGCGCTGATGGGGGATAAGGCGGAAAGTCAATTCGAGC GGCAGGCTTTAGAGGTGGCGCAAAATTTGCGAAACCAACCAAGCTACACGGGAAATTTTATGCTTTGGAATTTGAA ATAGCTTGCAATTTGTTGTAGAAACAATGTAGGGCTGAAATAACAGAC	452	LLNHAKKTQSLNGVEIVGLEHLDKVIYL DQAPIGKTPRSNPATYTGVMDEIRILFA EQKEAKILGYSASRFSFNVKGGRCCKC QGDGDIKIEMHFLPDVLVQCDSCCKGAK YNPQTLEIKVKGKSIADVLNMSVEEAY EFFAKFPKIAVKLKTLMVDVGLGYITLQ NATTLSGGEAQRIKAKELSKKDTGKT LYILDEPTTGLHFEDVNHLLQVLHSLVA LGNSMLVIEHNLDIKNADYIIMGPDG GDKGGKVIASGTPLEVAQNCEKTQSY TGKFLALELK

HP0674	453	AATACGCTAAAAATTTGAGCGCTTTAGCCCAAGACAACGCTTTAGATCCAGTCATTGGCAGAGAAGAAAGAGATTTTAA GAGTGATAGAAATTTTAGGGCGCAGAAAAAGAAATAACCCGCTTTTAAATTTGCGAAGCGGGCGGTAGGGAAAAACCTC CATCGCTGAAGCTTTGGCTTTAAATCGCTCAAAAAGAAAGTCCGGAGTTTTCAGAGAATATGAAGTCTATTCTTT GGATTTAGCCCTAATGGTGGCTGGGCAAAATACAGAGGGGATTTTGAAAACGCTTGAAAAAACGCTCAAAAGAAA TCCAAACAAACGGCCGTATCATTTTATTCATTGATGAATCCACACCTTTTAGCCACAGGGAGCAGTAACCGCTGGG AGCTTGGATCGCGCAATATATAAACCCGTTTAAACGGTTTAAACGGATGGAGCTTGAATGTTTAGGAGCGACCATTTTGA AGATACCGCAGCGTGTGAAAAAGACAAAGCTTTTAAATAGCGTTTTTACGTCAATAAAGTTGAAGAGCCTTCTAA AGAGCGTGTTACTTGAATTTTAAAAAGATCGCTCCCTTTATGAAGAACACACCGAGTGCGTTATGATGAGAGCGG TGTTTAAGGCATGCGTGGAATTTAACGAGTGATTACATGCATGATAAATCTTGCCGGATAAAGCGATTGAATTAATTAG ATGAGGTGGGATCGAGGAAAAAATCAGCCCTAAAAAGGGCAAAAAAATCGCGTTGATGATGTGAAAGAAACGCT CGCTCTAAAGCTTAAATCCCTAAATCGCTTTGAGCAGCGACAAAAAGCCCTTTTAAAGGAATTTGGAAAAATCGCT TAAAAATAAGATTTTGGCCCAAGCAGAACGATCAGTCTTGTCAGCAATCGGATTAATAATCCAGCATTCGGGGCTTTT TGCAAAAAATAAGCCCTGTGGGAGCTTTTATTCGTGGGCGCTAGTGGGTGGGAAAAACAGAAATTGGCTAAAGAA TTGGCC	454	YAKNLSALAQDNALDPVIGREEEILRVI EILGRRKKNPNLLIGEAG/VGKTSIAEAL ALKIAQKEVPEFLQEYEVYSLDALMVA GAKYRGDFEKLKKTLEIQQNGRIILF DEIHTLLGTGSSNAGSLCIAANILKPVLT DGLKCLGATTFEEYRS/FEKDKAFNR RFSVIKVEEPSKEACYLILKKIAPLYEEH HQVRYDESVEFKACVDLTSDYMHDKFL PDKAIELDEVGSRKKISIPKKKGKIGVD DVKETLALKLIPKMRLS:3DKKALLRNL EKSLKNKIFAQAEASISLV:NAIKIQHCGL SAKNKPVGSLFVGPSPGVGKTELAKEL A
HP0674	455	GCGTTTGGGTATCAAAAGGAAATTTTACATTAGCGTGAATGAAGAAATGAAAAAGCCCTTTTGAAATTGTTACCCCT AACGCTAAAAATATTGCAGGGTTTTTTCATTTAGAAACCGACTATGTAGGGCTTGGGATAGACCGGCAATGGCGTG TCTGGCGGTAAATATGCGTGGTGGATGCCGGAGTGCATTACGATAGATTTAATCAAGAGGGCAAGCAT TTAGGAGGTTGATTTTACCCGTTTAGCCCAATATATTCATCGCTATAAAAAAGCGCTAAAAATTTTAGAGCAACCT TTCAAGGCCTTAGATTCITTAGAAGTTTTACCTAAAGCACTAGAGACGCTGTGAATACGGCATGGTTTTGAGCGCTC ATTGCTGTATCCAGCATTTAGCCAAAAATCAAAAAATCTATCTTTGTGGGGCGATGCGAAGTATTTGAGCGCGTTT TTACCCCATCTGTTGCAAGGAGCGTTTGGTTTTGACGGGATGGAATCGCTCTTAAAAAAGCAGGGATACTAGA ATGCAATGATGCACAAATTTGAGTTTTTGGGCATGTTTTAGCCGCTTGAGCATGCTTTAGGGCATTTGTGTGGCG TGCTAAAGGTGGAACGCCCTTAGCGGTTTCTTTAAAGAGGTTAAAAAGCTCAAAAACTTTTGGTGCTTTGCGGG ATTACGGGATGTGGGAATATTGGAGGTATTTTAGAGCGCGTATTGCTTAGGAATGGGTGGCTTATTATTAGATTTT GCTAAAGAAATGGCTTATGAGGGGATTGTGCGATCCAGCTTGGGCTTATGTATGATTGCTTTTAGCGTTATGCC TAACACGCTGGATTTAATCAATGAATGAATGAACGAGCGGTTTTATGTTTGGCGCGAGCATGCAAGGCTCTAGTC AAATAGAAAAATCTATCCTAAAAAAATCGCTCTTTTTTGGGAGCGAGCATGAGGGGTTGTCTAAAAAAATCCTTG CTAAATGGATACTATATTGAGCGTAAAAATGCGAAGAGATTTTGATTCGCTCAATGTGAGCGTGGCAGCAGGGATC TTAATGGATAAAATCAACTAGGTGGTCAATTTGAATGGAACAGAAATAAAAAAGTTTAGAAAAATTTAGATCTTTCTGATG TTCAAAAATTTCTAAAGATATTTCTGGTGCAACA	456	RLGIQKEIFYISVNEENEKALLNCYPNA KNIAGFFHLETDYVGLGIDRQMACLAV NNGVVVDAGSAITIDLKEGKHLGGCIL PGLAQYIHAYKKSAKILEQPFKALDSLE VLPKSTRDAVNYGMVLS/ACIQHLAK NQKIYLCGGDAKYL:SAFLPHSVCKERL VFDGMEIALKKAGILECK
HP0553	457	TGGCTAAGGTGGAACGCCCTTAGCGGTTTCTTTAAAGAGGTTAAAAAGCTCAAAAACTTTTGGTGCTTTGCGGG ATTACGGGATGTGGGAATATTGGAGGTATTTTAGAGCGCGTATTGCTTAGGAATGGGTGGCTTATTATTAGATTTT GCTAAAGAAATGGCTTATGAGGGGATTGTGCGATCCAGCTTGGGCTTATGTATGATTGCTTTTAGCGTTATGCC TAACACGCTGGATTTAATCAATGAATGAATGAACGAGCGGTTTTATGTTTGGCGCGAGCATGCAAGGCTCTAGTC AAATAGAAAAATCTATCCTAAAAAAATCGCTCTTTTTTGGGAGCGAGCATGAGGGGTTGTCTAAAAAAATCCTTG CTAAATGGATACTATATTGAGCGTAAAAATGCGAAGAGATTTTGATTCGCTCAATGTGAGCGTGGCAGCAGGGATC TTAATGGATAAAATCAACTAGGTGGTCAATTTGAATGGAACAGAAATAAAAAAGTTTAGAAAAATTTAGATCTTTCTGATG TTCAAAAATTTCTAAAGATATTTCTGGTGCAACA	458	AKVELPLAVSLKEVKAQKLLVLCGTD VGNIGGIFRSAYCLGMGGVILDFAKELA YEGIVRSSLGLMYDLFPFSVMPNTLDLIN ELKTSGLCLGASMQGS:QIENLSLKK CALFLGSEHEGLSKKILAKMDTILSVKM RRDFDSLNVSAAGILMEKIN
HP0311	459	CTAGTGCAGAAATTTTGACAAAGGGCGGATAGACTATGAGAGCCTCTTTTCACGCCAAAAATAGGGCGCGAAATTTT ATGCCAAGAAATGCCAAAGATTTCGACTCGAAGCTTTGAGACTTTAAGCATTAATTTGAAGCAGCATGGAGTG GAGCGGCTTTGGGATTTGGCTGAGTTTGTATTGTCATCAATACGGCACACAGATTTTACGCATCAAGGGGATTATTG ACATTGGAAGCGGCTTTTGGTGAGTATTAACGGCGGTGATGTCATGTCAATTTACCCGCCCTAAGCATATTTTAAAGGATC AAAACGGCTCAACCTCGTTTTATCATCGCCCATTTAGAGCGTGAAAAAATCTTAAATTCCTTAAAGGGTTTTTAAAGGA TTTTCTCGGCATCAAGGGTTTGAACCCCAATAATTTTCTATTATGGATAGCTGTTTGCAATTTTGATGGGAAAAAGA ACGATGAAGCTTAAACCCAAA	460	SAEIFDKRAIDYESLFSRKNRARNFMP RMPKDSHQGFETLSINFEGTMEWSA FGIWSLLHHQYGTQILRIKGIIDIGSGFL VSINGVMHYVPPKHILKIDQNGSNLVFI MRHLEREKILNSLKGFKDFLGIKGFETQ
HP1077	461	GGGATTTTAAATCTAGAGATTTGCCCCAAAACTCCATCTTGATAAAAAAGCTCTCCCAACAATACAGCCCATGCATGC AACTTAACGCATCAAAACACTACACTCTACCGGGGTAGAGAGCCTGATAAATGCACAAAGAGTTTAAAAAATCCG CTCTCATGCTCATGACTTAGCGCTAGGTTATTGTGAGTAAGAAATAGCAATACGGCTTAAAGGCTATAGAAATTT TAAACGCTTGGCTAAAGAGCTTCAAGCGTGGATACTTATCAGAGCGGAGGATAATATCAATTTTACATGCCTTATA TGAACATGGCTTATTGGTTGTCAAAAAAGCGGTTTTCTAGCCCAAGATATGAAGATTTTCATTAAAGCGGATGCGCCAGT A	462	DFKSRDLPQKHLHDKLSQTIQPCMQ NASKHYTSTGVREPKCTKSFKKSAL MSYDLALGYLVSKNKQYGLKAIEILNA WAKELQSVDTYQSEDNINIFYMPYMN AYWVFKKAFPSPEYEDFIKMRMQ

HP1077	463	TAATGCCCTTGTAAACCCGCTTATCCGCTAGCGGTAATGGCATGGTGTGGAGCAGGCTTAGAAAAAAT GCAAGCGGTTATGCGAGCGTGATCATCCCAATCAAGCGCGGAGTGGTAAGCCAAAGAAATACAATGTAAGGATT TTGGAAAAACACACGCTTTTAGCGAGCATTAATAATGCCCTTAGATTATTCATCGGTAAGCAGCGTTCAAACCCAT ATCTATGTTTTAGGGTCAATGAAAGCATGACGCTAAGCAAGGGTGAATTTATTAATTTAGTAACGACGGCTAC GCTAGAGCGAATCGCAAAAAGCCAAAGCCAGCCACAATTTAAAGACACGCAATAACGCCAAAGAGCGCTACAACG AAGTCGTGATTAGTCCATATTGGCCATCATGTTGAAATTTCTAAGCGAAGATGACTATTATGAAAACACCATAG ATCCCAAAACGGGAGCGATTGGAAACCAAAACCCACTGACACCAACCCGAATTAGAGGATTTTAAAGAAACG ATAGCCGATTACCTTTCTATGAAGTAAGCTTGAATTTAAACCAAC	464	NAFVLNPPYSASGNMGVFEQALEKM QSGYASVVIQSSAGSGKAKEYNVRILEK HTLLASIKMPLDLFIGKSSVQTHIYVFRV NEKHDAKQVRVKFINFSNDGYARANRK KAKASHNLKOTHNAKERYNEVVDLVI GQSCLKFLSEDDYENTIDPKNGSDW NQNKPTDTKPELEDFKRTIADYLSYEV SLILKN
HP0798	465	AGCAAGCGGTGTCATCAGCATGAATAAGAGGCTTATGACGCTATTATCAATCATTCGCTCAAAAAGGGTCCGGTGT TACAGACTGCTATTATTGCTGGAATTATGGGGCTAAAAGACAGGAGCTCATTCCTCATGTGCCATCCAATCATG CTCAATGGGTGGATATTGATATTTAGAAAGAAAAGAGACTTGTAGTTTAACTCTATCGGAGAGTCAAAACTCAA GCTAAACGGGCTAGAAATGGAAGCGCTAATGAGTGTAGCATAGGGCTTTAACCATTATGACATGGTGAAGC CAATTGACAAGAGCATGACAATAGCGGTGTGATGTTGGAGCATAAAGTGAGGCAAAAGTGGGATTATAACGCTA AAAAATAGAAAAAGACCAATAATCTAAGATGTTAGGTAAATAACATTTTGACAACAAAAGCGTGTGGTTCCTC GGGTTGTTGTTATAGAAAGTCTAAATATTACAATCAAGGATAGAACGATGAAAGCAAAATAATCATTTTAAAGATTTTG CATGGAAAAA	466	ASGRISMNKEAYDAINHCVKGPVLQ TAIAGIMGAKKTSSELIPMCHPIMLNGVD IDILEKETCSFKLYARVKTQAKTGVEM EALMSVIGLLTIYDMVKAKIDKSMITSG VMLEHKSGGKSGDYNAKK
HP0436	467	GCTCCAAAGCATCACTAAAGATGGGTGAGCGGTAAAGAGATTGAATTAAGTTGCCGGTAGCTAACATGGCGG CTCAACTCGTTAAAGAGTAGCGAGCAAAACCGCTGATGCTCGCGGCGATGGCAGCACACGACCGTGTGG CTTATAGCATTTTAAAGAAAGTTTGAAGAACATCACGGCTGGGCTAACCTATTGAAGTAAACGAGGATGGAT AAAGCCGCTGAAGCCATTATTAATGAGCTTAAAGAAAGCGAGCAAAAGTGGCGGTAAAGAAAGAAATCACCAAGT GGCGACCATTTCTGCAAACTCCGATCACAATATCGGAACTCATCGTGACGCTATGAAAAAGTGGTAAAGACG GCGTGATCACCGTTGAAGAAAGCTAAGGCGATTGAAGATGAAGTGAAGGCGATGCAATTTGATAGAGGC TACCTCTCCCTTATTTGTAAACAAACGCTGAGAAATGACCGCTCAATTGGATAACGCTTACATCCTTTTAAACGGAT AAAAAATCTCTAGCATGAAAGACATTTCTCCGCTACTAGAAAAAACCATGAAAGAGGGCAACCGCTTTTAAATCATC GC	468	APSTITKDVSAKEIELSCPVANMGAQ LVKEVASKTADAAGDGTATTATVLAISIF KEGLRNITAGANPIEVKRGMDKAAEAI NELKASKKVGGKEITQVATISANS HNIGKLIADAMEKVKGKGVITVEEAKGI EDELVDVEGMQFDRGYLSPYFVTNAE KMTAQLDNAYILLTDKKISSMKDILPILLE KTMKEGKPLLI
HP0436	469	ACAGGCGATAAAGTGAGATTGGCGGATACAGACTTGATCGCTGAAGTAGAACATGACTACACCAATTTATGGCGAAGA GCTTAAATTCGGTGGCGGTAAACCCCTGAGAGAAAGCATGAGCCATCAACCAACCTAGCAAGAAAGAAATGGAT CTAATCATCACTAACGCTTTAATCGTGATTACACCGGATTATATAAGCGGATATTGGTATTAAGATGGCAAAATC GCTGGCATGGTAAAGCGGTAAACAAAGACATGCAAGATGGCGTTAAACCAATCTTAGCGTAGGTCTGCTACTGA AGCCTTAGCCGGTGAAGGTTTGTATCGTAACTGCTGGTATTGACACACAT	470	TGDKVRLGDTDLIAEVEHDYTYGEELK FGGKTLREGMSQSNPNPSKEELDIIIT NALIVDTGYKADIGIKDKGIAGIGKGG NKDMQDGVKNLNSVGPATEALAGEGL IVTAGGIDTH
HP0436	471	AAAAAATCTTAGTCATAGCGGATCTGATCGCTGATTATTATTGTGGGGAAGAGCGAACGGCTTCGCCTGAAGC CCCTGTGCTGTTTAGAAGTCCAGAGGGAGAGTAAGAATTTAGCGGAGCGGCTAATGTGGCTAATAACCTCATTT CTTTAAAGCTAAAGTTTATTGTGGGCTGTGGCGATGATTAGAGGGCGAGCATTTTATTAGCGCTTTAAAG CAAGAGGATTGACGCTTCAGGTATTTGATAGATAAAACCCGTTGCACACGCTTAAACGCGCATCATCGCGCAA AACCAGCAATCGCGCGGTGATAAGGAAATCAAGACCCCTTAAACGCTGATTAAAGAAAAAATTTTAGATTTT TTCACAGAAAAATCCAAAGAAATAGATGGGTTATCTTTTCAGATTACAATAAGGCGGTGTTGATTGAACTCACT CAAGCAATGATCGCTAGCCAAACCAACACCAAGCTCATTTTATGCGACCTAAAGGGAAGATTATAGCAAAATAT TCCATGCGAGTTGATCACGCTAATCGCACCGAATTAGAGCATGCGCTCCATTGAAATTAGACAGCCATCGGAA TTTATCAAAAGCGCTCCAAATCTTAAAGAAACTTATCATCGCTATGCTTTAGTAACTTTGAGTGAACAGGCATC GCTTTTGAAGAAAGCGGAGTAGTCAATGGCCCACTATCGCTAAAGAAAGTTTATGATGTAACGCGGAGCGGA TACGGTATCGGCTTTTAAACGCTCTCTTTATTAGAAATCAATGAGCCTAAAGATGCTTGGAGTTTGGCAATGGCG GGCGGCTGTGGTGGTAAATGGGAGCGGCTTAGCGAGTTTAGAAGAAATCGCTTTGATTGTAACCAACG CACCGT	472	KKILVIGDLIADYLLWKGKSERLSPEAPV PVLEVQRESKNLGAANVANNLISLKA KVFLCGVVGDDLEGEHIFISALKARGID ASGILDKTRCTTLKTRIAQNNQIARVD KEIKDPLNADLRKKLLDFFTEKIQEIDGV ILSDYNKGVLDFELTQAMIALANQHKL ILCDPKGKDYSKYSHASLITPNRTELEH ALHLKLDSHANLSKALQILKETYHIAMP LVTLSEQGIQAFLEKGEVNCPTIAKEVY DVTGAGDTVIASLTLSLESMSLKDAC EFANAAAAVVGKMGSALESLEIALIL NQTHP

HP0436	473	TGGTTATGCTTTGGCAGGATCAAGCGCGAATTTGAGTTAAGGGCTGGTACGGATACCAAAAACGGCACAGCCACTT TTAATAACGATATTAGTTGGGAAGATTGTGAATTTAAAGTGGATGCTCATACAGCTAATTTTAAAGGATTATTGATAC TGGTAATGGTGGTTCAACACCTTAGATTTAGTGGCTTACAGTAAGTCAATATCAACAAGCTCATACGGCTTC CACTAATGTGGCGTTAAACCTTCAACATTAATGAATGTTGTTAAGACCAATGGGTGAGTGTGGGGAATACA CTCATTTAGCGAAGATATAGGCAGTCAATCGCGCATCAATACCGTGGTTTGAACCTGGCACTAGGTCAATCTTTT CTGGGGTGTCAAAATTTAAAGCGGTGAAACCTGTTATAGATGAGTTTACTATAGCCCTTGGGGCACATCAAAAGC CTAGGAATATTAAATGTTGAATCACCAGAAATTCGCTTCTCAACCCCAAGAACCTTGAATTTAACCATTCAGGGGA TTATGTTAATAATCTAACCTGGTCAAAATCGGTCATGACTATAGTCAATTTTCAATTTAACCATTCAGGGGA TTTCATCAACAATCAAGGCATCATCAATTTGTCGAGGGGCAAGTAGCCACCTTGAATGTAGGCAATGCGG CAGCTATGTTCTTAGTAATAATGTGATAGCGCACTGGTTTACCAACCGCTCATGAAGATTAAAGCGCTCAA GATCTAATAAATAAGAACATGCTTATTGAAAGCGAAATCATCGTTATGGCAATGTTCTTAGGCACATAACA GCATTAGTAATGTTAATCTAATAGAGCAATTCAAAGAGCGCTAGCCCTTACAACAACAATAACCGCATGGATATT GTGTGGTGGAAATACTGATGACATTAAAGCATCGGGACGGCTATCGGCAATCAAAAGCATGGTGAATAACCCCGA CAATTACAAGTAT	474	GYALAGSSANFEFKAGTJTKNGTATF NNDISLGRFVNKVDHAHTANFKGIDTG NGGFNTLDFSGVTGKVNINKLITASTNV AVKNFNINELVKTNGVSEVGEYTHFSE DIGSQSRINTVRLTGTTRSIFSGGVKFK SGEKLVIDEFYSPWNYFDARNIKNVEI TRKFASSTPENPWGTSKLMFNNTLG QNAVMDYSQFSNLTIQGFDFINNQQGTIN YLVRGGQVATLNVGNAVAMFFSNVVD SATGFYQPLMKINSADQLKNKEHVLLK AKIIGYGNVSLGTNSISNVNLTIEQFKERL ALYNNNNRMDICVVRNTDDIKACGTAI GNQSMVNNPDNYKYLIKGAWKNIGISK TANGSKISV	475	LGGMIPKERMERALGSGVIISKDGYIVT NNHVIDGADKIKVTIPGSNKEYSATLVG TDESDDLAVIRITKDNLPKTFKSDNDIS VGDLVFAIGNPFGVGESVTQGVISALN KSGIGINSYENFIQTDAINPNSGGALI DSRGGLVGINTAIISKGTGNHIGIFAIP SNMWKDTVTQLIKTKIERGYLVGLQ DLSGDLQNSYDNKEGA'VISVEKDSPA KKAGILVWDLITEVNGKIVKNTNELRN LIGSMLPNQRVTLKVIREKKERAFTLT AERKNPNKKTETISAQNGAQQQLNGLQ VEDLTQETKRSMRLSDIVQGVLSQV NENSPAEOAGFRQGNIIKIEEVEVKS ADFNHLEKYKGPKRFLVLDLNQGY RIILVK	476	ALLQKALKLYALLKPLELNVSIASSFSKI GNLFGRELESFCVKIQPKNTRALNSEK LYLKLQKGVIAISCEFCFEVFSLNE KDFEKIALVLEEILNKA
HP0436	475	TTTGGGTGGCATGATTCCTAAGAAAGAAATGGAAAGGGCTTTAGGCAGCGGCGTAATCTTCTAAAGACGGCTATA TTGTAACATAAACCATGTGATTGATGGCGGATAAGATTAAAGTTACCATCCAGGAGCAATAAAGAATATTCCG CCACTCTAGTAGGCACCGATTCTGAAGCGATTAGCGGTGATTCCGCATCACTAAAGACAATCTGCCACGATCAAA TTCCTGATTCTAATGATATTCAGTGGCGGATTGTTTTGCGATTGTTAACCTTTTGGCGTGGCGAAAGCGTT ACGCAAGGCATTGTTTCAGCGCTCAATAAAGCGGATTGGGATCAACAGCTATGAGAAATTCATTCAACAGACGCG TTCCATCAATCCTGGAAATTCGGGGCGCTTAAATTGATAGCGGTGAGGGTTAGTGGGATTAATACCGCTATTA TCTCTAAACTGGGGCAACCGGATTGGCTTTGCCATCCCTTCTAACATGTTTAAAGATAGTAACTGTAACCCAACTC ATCAAAACCGGTAAAGATTGAAAGAGGTACTTGGCGTGGCTTCAAGATTGAGTGGCGATTGTCAAAATTTCTTA TGACAAACAAAGAGGGCGGTAGTCAATTAGCGTAGAAAGAGACTCTCCGCTAAAGACGAGGATTTGGTGTGG GATTTGATCACCGAAGTCAATGGGAAAGGTTAAACACGAAATGAGTTAAGAAATCTAATCGGCTCCATGCTACC CAATCAAGAGTAACCTTAAAGTCAATTAGAGACAAAGAACCGGCTTCAACCTCACTAGCTAGTGAAGGAAAGAAA CCCTAACAAAGAAAGAACCATTTCTGCTCAAAACGGCGCGCAAGGCCAATTGAACGGGCTTCAAGTAGAAGATTAA CTCAAGAAACCAAGGCTCTATGCGTTTGAGCGGATGATGTTCAAGGGGTTTTAGTCTCTCAAGTGAATGAAATTCCTCC CAGCAGAGCAAGCGGATTT	477	CGCATTATTGCAAAAAGCCCTCAAACTCTACGCTCTTTTAAAGCCCTTAGAATGTGAGCATAGCCTCTAGCTT TTCTAAATAGGGAATTTGTTGGTAGGGAATTAGAAATCCTTTTGGTGAAATCCAGCCCAAAACACCCGTGCTTT AAATAGTGAGAACTTTATTAAAGCTTTTCCAAAGAGCGGTTATCGCAAGGATTCATGCGAATTCGTGCTTTGAA GTCCTTAGCTTGAATGAAAGATTTTGAAGAAATCGCTCTGGTTTAGAAGAAATCTTAATAAGCTTAAAGAAATTCG CTATAATAAATTTCTTTAAACGGCCATATCCCCACAAACGCTAGAGAAATGATAGAAACGACAGAACATCAAT TTAAAGGAACCTTAAGAAATGGAAATAATCAGCGATCTTATAGAAATGCAATGCGTATGAAAAAATTTGCCTAAAGAGAT GATTTCAAAAGTGATTCAGGCTGTTTAAAGATGGCGCAAAATGAGTTAGACCCCTTAGCAGCTACTTGGTGG TTGAAGAAACAAAGCAGCTCCAGCTTATCCAGTTGGTAGAAGTTTAGAAGATGGTGAAGAAATTTGGTTAACGAC CCTTCTAAATACATCAGCTGTCTAAAGCCAAAGAAATGGATCCAGCGTTAAGATTAAAGACGAAATGTCCTATAGC TTGAGTTTGGAGAGCATGAACAAGGAGCGGATCAACCGCTTTTAAAGATTGCAATACCAAGTGAAGAAAGCGTTA GAAGACAGCCACTTTGAAGCGTTTCAAAAGCGTCTTAACAGCGTTTTAATGGGCAAGTGATTTTAGTGATCACA CCAAACACCTTTATTGAGATTGAGCAGCAATTCAGGGCGTCTTTCCATGCGCCATCGCATCAAGGGCGGAGATT TTAAAGTGGCGGATAGCATTAAGCGGTTTTAACGCAAGTCAACCGCACGAAAGGCTTATTATTAGAGCTGAGC CGCACCCCCCTA				

HP0071	479	GCAAAAAGACGCTTGGGGTTCATCTATGAGATCAGCGAGTTCATGAAAGCCTATACCGCATTTGCTAAAAAACAAGACCGATACGCTATTTAGGATCTCCCTCTAGCTATTGGCCAGCATTTAACGACTGCCCTTTATGTCAAAATACCTGATTTGACGCTTTGAAAAAGCTTTTGGTGCTTATTATTACCAAACTTGGATTGCAGGAGGCACGATCAGCGCATCAAGCAAAACAGATCAACACATTATCAAAACGTTAAAGCAATAAGAGCGTTGAAACCATCAAAAGAGCTTATATTGAATAGCATCGACTCTTATAACACCTTTGATCAATACCTCTATAACTTATGGGATAGCTCTTCTGTTTATCATAGCAATATGGGTGCGTCTGTCTTAGCCCTAGCTAATATTTCATGGCAGATGAAGAGAAACCCCATTTATCGCTATGGATGCCAAACCCAAAGTGGAGCATATTTGCCACAAACGCCCAAGAGGAGGAGTCAATGGAACGCGGATTTTGACAAAGAANAAGAGAGAAGATGGGTAATAATATCGCGAATTTAAACCTTTTAAAGCGTAAAAAGAACGCGCATGCTTTAAACGGGATTTT	480	KKDACGFIYEISEFMKAYTALLKKQDRY VYLLRYLPSRYWASILTTALYVKYPDFD ALKKLLVSYYYQTWAGGTTRIKQTSIN IKNVKSNSKSVETIKELILNSIDSYNFDC YLYNLWDSSSVYHSKWVRPVLALANY FMADEEKPHFIAMDAETQVEHILPQTP KRGSQWNADFDKEKREEWVNNIANLT LLKRKNAHALNGDF
HP0071	481	TTCTTTGATCGCTTCAGTGTATTATACGCTTATGGCACAGGAGGATTAAAGGCTTGGCCCTAACTACAGGCATTGGGATTTTAGCCTCTATTATCACCGCTATTGTTGGCACGCAAGGATTTATCAAGCCCTTTTACCTAACTCACTCAAAACAAAAGCCCTTACTTTTGCTTGGCGTGAATAAAAGAGCTTAGGAGGTTTATGGAAATTTATTCAAACGAACTAGAAATCTTAAGCTTCATGCGTTATCCCAATTATGGGTGATCGTTTACGCAATTTTAGCGCTTCTAGCGTTGGGCTTTTGTGTTTCAAGGGTTTTCTTAGGGATTGATTTGCGGGGGGAGTTTGGTGCAAGTGCCTACACTCAAAACGCCCTCATTAAGAAAGTGCAGATCTGTTTGA AAAAGAAAGCTCGCTTCAAAAGCGTGCAAGTGAGCGAATTTGGCTCTAAAGAAAGAAATTTAATCAAAATCCCTTTGTAGAAACGGCTGAAATGAAGATCTGAACGCTATCGTGCCCAACATTTCTAAACCCAGCGGGGATTTGAAATCCGTAAATTTGACACCGTGGCCCTAGAGTGGGAGCGAATTGAAAGAGAAAGGCATTTTGTCGCTGATTTAGCAATTAATAGCGATCATGGTTATGTAGTTTCCGCTATGAATGGCGTTTGTCTTTAGCGAGCGTCATTGGCTTTGTGCATGATGTGATTTAGTGGCAAGCTCGGTGATTGTTTAAAGATTGATGAATTTGGAAGTGAATGGCGCTTGCTCACCTTGATTGGGATTCCATTATGATACGATCATTATTTTACAGGATCAGAGAAAGAGATGCTCTCTCAAAAACCAAAACGCCACTCAAGCCATTGATGAAGCCATTTCTAGCACGCTCAGCGCACGCTTTTAACTTCTTTAAACCGTGTTTTTGTGGTGTGATTTTGTGGGTGTTGGGAGTAAGATCATCATTTGGCTTTTTCATTGCCCATGTTAATAGGCACGA	482	SLIASVLLYAYGTGAIKGFALTGTGILAS SIITAIVGTQGIYQALLPKLTQTKSLYFW FGVKNKRA
HP1402	483	TGGAAAAAGATATAGCCCATGCGGTTTCAAGGGTAAATGAAAGCATGGTGATGAAGAAAAATTTGTGCATGCCGGGTTTGTGCTTATTGCGTGCAATTATGCGGCCTTGTCGCGTTGAATAAAAGACACAGCGTGGTGTCTTAATAACATCAATTTTATGCCCCCTAGAAATGAATCAAGAAAGCACTCATTAAAGCCGAAGTATTCAAGATGCGGTGAAAAAGGCTGAAATAAAATAGAGCGGTTGTAGACATTCAGGTTTAGAGGGAATGATAGAAATTTGTGGTGTGTGATAAAAGCCTTTAAATTCAAATTTAAAGAGAGTAGTTAAATGGTTATGTTTAGTCGTGATAGTTTAAAGACACCAAGTAATGGCACCTCTATGACAGCGTTTCTGTTTGAAGCGCTGAAAAAAAGAGGGCATGTGATGAGAGTGGTCGCCCTCATGTGGATAATTTAGGGAGTGAAGAAAGAGGGGTATTACAACCTTAAAGAGCGCTACATCCCTTAGTTACAGAAATTTCACACAAACACACATCCTTTTGTCTAAACCCGATGAAAAATCTTAAAGAAAGGCTTTTAAAGGAGCGGATATGATCCATACTTATTGGCTTTTGTAGAAAAACAGCCGTAAAAATCGCGCGAGAAATGCAAGTGCCCTTATATTGGCTCTTTCCATTTACAGCCAGAGCATATTTC	484	EKDIHAHARFKGNESMVYEENFVHAGF VLIACNYAALCALNKRHSVWVSNNINFY APLELNQEALIKAQVIQDGVKKAEIKIEA FVLDIQVLEGMIEIVFDKPKPFKNFKE E
HP1402	485	GATAGAAACCGAGCTTGGCATGCTTTAAAGCGCATGGGAGTTTGTGAAAAAAATCCAAAAACCCCTTAAAAACA AATTCAAACCCCTTAAACCAACCATTCCTAAACCTAAAGAAAGCGAGCTTGCGCTTGATTTAAGGGGCAACGCAGC GAAGAAGCCCTGGATTTACTAGACGCTTTTAAACGACGCGCTTTTAGGGGGCTTTGAAGAAGTGTGCTGATTTGCCA CGGCAAAAGGGAGCGGATTTTAGAAAAAGTTTGTGAAAGAAATTTTAAAAAACCCACCCCAAAAGTGGTGAGCTTTAGCG ACGCTCCCAATAATTTAGGGCG	486	IETELGMRLKAHGSLLKKIQKPPKNKFK PPKTTIPKPKAEASLRDLRGRSEAL DLDAFLNDALLGGFEELVCHGKGSGL LEKFVKEFLKNHPKVVSFSDAPINLG

HP1402	487	TCAATCAAGCTAAAGTCCCTGTGATTTATGAAGAAACCAATTTGTTGCCTATGGGTTTATCCATTAGCCTTTAGGG GGGTGGAGCTTAAGCGATAAAACCAAGTTGGTTTGGCGAAATTTATTCGGCAAGTTTAAACGAAGGCACATAAA GAGCTTGGTGGGTGGGTTTGGCAACTTTAGAGCAAAAGCGATGATTTGAATGTGATACCGACACAGAAAG ATTTGCAATCACCTTATAGAAATTTTAAAGAAATACGAAGATGAAGCCATTACCGCTTAAAGAGCTTTTAAATCCCC TAATTTACGCAAAACGCTTTAGAAAAGTCAAAACCAATTTAGCCGCACTTTACAAAAGAAAGCGATTTTGA CTATTTGGCTAAATGACCTTAAAGCAAGAGCTTTTGTAAACACCCCTTTAGCTAACGCGCTTAGGCACTAAAGA GAGCATTTCAAAAATCAAGCTAGACGATTTGAACAGCAATTTGCTAAGGCTTTGAAGTCAATCAAGCTCGTGTGTT GCTTGGGGGCGATTTGAAAATCGATCAACCCCTTAAGCGTTTGAATAACGCCCTTAATTTCTTGCCACAAGGTAAAG CGTATGAAGAGCCTTATTTTGAACGAGCGATAAAAAGCGAAAAGTCTCTATAAGACACTGAGCAGGCTTTC GTGATTTTGGTGGCCTTTAAATCAAGGATTTAAACAGGATTTAGCGAAATCTAAAGTCATGATGTTTGTGCTT GGTGGGGGTTTGGCTCTCGTTTAAATGGAATAATCA	488	NQAKVPVIYEENHLLPM/GFIHLAFRGG GSLSDKNQLGLAKLFAQVNLNEGKELCG AVGFAQLLEQKAISLNVDTSTEDLQITL EFLKEYEDEAITRLKELLKSPNFTQNAL EKVKTQMLAALLQKESDQDYLAKLTLK QELFANTPLANAALGTHESIKIKLDDL KQQFAKVFELNKLVVVI.GGDLKIDQTL KRLNNALNPLPQKGAYIEEPYFETSDKK SEKVLKDTQEQAFVYFGAPFKIKDLKQ DLAKSKVMMFVLGGGFGSRLMEKI
HP1402	489	GCAATTAAGGCATGTGAAGATCTCAAAAGCTTTTAAACGCATGCCAGAAAACCTTGCTTTCACGGCTAAATTTGA AATTGAATGCGAAAGCTTTGAAGAGGCCAAACCGCCATGAATGCGGAGCGGATATTGTGATGTGCGATAATTTGA GCGTTTGAAGACTAAAGAAATTCGCGCTTATAGAGATGCGCATATCCCTTTGTTTACTGGAAGCGAGCGGGAAC ATTTCACTAGAGAGCAATTAACGCTTACGCTAAAGCGGCTGGATGCCATTAGCGTAGGGCTTTAATCCATCAAGC CACTTTTATTGACATGCACATGAAATGGCTTAAAGACTTTAAAGGGGTTTAAACATGCTAAAGAAATATTTAGAA AGCATTAAAGATCTTACGCCCTGAAAGAAATGAATCACTCAGCACCGCCCTTCTTTATACAACTTGCTTAATCAGTTAAAA AACCATTTCAATAAAGAGTTTAAAGATTGAACATGAGCCTGAAAGAAAGCAAGGAGCCAGCC	490	HLRHVKDLKSLTHARKNLPFTAKIEIE CESFEEAKNAMNAGADIVMCDNLSVL ETKEIAAYRDAHYPFVLLLEASGNISLES INAYAKSGVDAISVGALIHQATTFIDMHM KMA
HP0071	491	GCAAAAAGACGCTTGGGTTTCATCTATGAGATCAGCGAGTTTCATGAAAGCCTATACCGCATTTGCTAAAAAACAA GACCGATACGCTATTATTGAGGTATCTCCCTCTAGGATTGGCCAGCATTTTAAACGACTGCCCTTTATGTCAAA TACCTGATTTTACGCTTTGAAAAGCTTTTGGTGTCTTATTATACCAAACTTGGATTGCGAGGACGATCACG CGCATCAAGCAAAACCGATCAACATTATCAAAACGTTAAAGCAATAAGAGCGTTGAACCATCAAGAGCCTTATA TTGAATAGCATCGACTCTTAAACACCTTTGATCAATACCTCTATACTTATGGGATAGCTCTTCTGTTTATCATAGCA AATGGTGGCTGCTGTCTAGCCCTAGCTAATTTTATGCGAGATGAAGAGAAACCCCATTTTATCGCTATGGATG CCGAAACCCAAAGTGAGCATATTTGCCACAAACGCCCAAGAGGCGAGTCAATGGAACGGGATTTGACAAAGA AAAAAGAGAAGAAATGGTAAATAATATCGCGAATTTAACCTTTTAAAGCGTAAAGAAAGACGCGCATGCTTTAAACGG GGATTTTGTATGAAAAAAGAAAAATTTATGAGGCAAGAACACGAGCAAGTATTAGCTGTTATGACATCACTAAAGA ATTGTATAGCAATTATAGGAAGTGGAAATGAGAAATCCCTCCCAAGAGCGATACAAAT	492	KKDACGFIYESEFMKAYTALLKKQDRY VYLLRYPTRYWASILTALVYKYPDFD ALKKLVSYYYQTWAGGTTRIKQTSIN IHKNVKSNKSVETIKELILNSIDSYNTFDQ YLYNLWDSSSVYHSKWVRPVLALANY FMADEEKPHFIAMDAETQVEHILPQTP IKRGSQWNADFDKEKREEWVNNIANLT LLKRKKNAHALNGDFDEKRIYGGKDT SKVISCYDITKELYSNYFKWNEKSLQE RYK
HP0775	493	CCCTTTTAGGCACAGGAGCAGTAACGCTGGAGCTTGGATGCGGCGAATATATAAACCGGTTTAAACGGATGG GAGCTTGAATGTTTAGGAGCGGACCACTTTGAAGAATACCGCAGCGTGTGTTGAAAAAGACAAAGGCTTTTAAATAGGC GTTTTTCAGTCATAAAAGTTGAAGAGCCTTCTAAAGAGCGGTACTTGATTTTAAAAAAGATCGCTCCCTTTTATGA AGAACACCAAGGTCGTTATGATGAGAGCGGTGTTAAGGCATGCGTGGATTTAACGAGTGATTACATGATGATA AATCTTGCCGGATAAAGCGATTGAATTTATGATGAGGTGGGATCGAGGAAAAAATCAGCCCTAAAAAGGGCAAA AAAAATCGGCGTTGATGATGTGAAAGAAACGCTCGCTTAAAGCTTAAATCCCTAAATGCGTTTGAAGCGGACAA AAAAGCCCTTTTAAAGGAATTTGAAAAATCGCTTAAAAATAAGATTTTGGCCAAAGCAGAGCGATCAGTCTTGTGAG CAATGCGATTAAATCCAGCATTTGGGGCTTTCTGCAAAAAATAAGCCTGTGGGAGCTTTTATTTCGTGGGGCCTA GTGGGGTGGGAAACAGAAATTCGCTAAAGAAATTCGCTTGAATTTG	494	LLGTGSSNAGSLDAANILKPVLTDGSL KCLGATTFEEYRSVFEKDKAFNRFSV IKVEEPSKEACYLILKKIAPLYEEHHQV RYDESVFKAQVLDLTSY/MHDKFLPDK AIELLDEVGSRKKISPKKGGKIGVDDVK ETLALKLKIPKMRLLSSDIKALLRNLEKS LKNKIFAQAEAISLSVNAIKIQHCGLSAK NKPVGSLFVGPSPGVGKTELAKELALN L

HP0775	495	GTGCTTGACAATAAGCGCGCTTTGAATGATTGAGCATGTTTAGACAATAACAAAGCCGTGAGATTTTCTCC GTTTGAAAAGTGCTTTTAAATGGGTTTAAAGCTTTGGAAATGCTCCCTGATATGAGCGTCTTCTTTGTCAA TAAATCAGAAAGCGACACGAAAGCGATGCTTTGATCAAGAAGAGAGCCAGTTAAAGAGCGGATTTTAAAGAA AAATGAAAATCATTTTGAATGTGAATTTATTTGCGAAGAGGTTTAGCGAAGAGAAAGCTAATCGCGTTTG AAAATACTCTCAAGCCCTAAATCCAACTACATCAATATCCATTAATACAGACGATTTTCTCAATCAAT ATCCTTGATTTGAATACTCTAAAGAGAGATTGTCAACCGCTAGACGCTCTTACGCCCTGGCTTTAGAAAGAA AAAAACAAGGCATGCTTAATTCATCAATTTGGATATGGAAGAAATTTAGGATTTAGAGCTAACAGTGAGTCGTT ATGGAATCCATCGCTAAATTTGATTTGAACGCTGTTATGCTGCAAGCCTATATTCGGGATTTATGAATATTTGA AAAACTGCACGCTTTTCTAAAGAAAGGTTTAAAGGTTGAAGCCCATTAATCCGCTTTGTTAAGGGAGCGA ACATGGAG	496	ICLDNKARFEMIEHVLDKYKSREIFSPFE KVLLMGFLSFGKMLPDMSPVFFVKNKIR SDTKAMVLDQEESQLKERILKRNEKII LNVNFIGEEVLGEEENARFEKYSQAL KSNYIQYISIKITTFISQINILDFEYSKKEI VKRLDALYALALEEEKKQGMFKFINLD MEEFRDLELTVESFMESIAKFDLNAGIV LQAYIPDSYEYLLKHLHAFSKERVLLKGLK PIKIRFVKGANME
HP0775	497	GAGCGAGTGTGAGCGCGCTTACTTCTGTAGGCTTAGGGCGAGCCCTAAACATTCAGTTTCAGCTAATGACAAA CGGATGCGAGGATAATTTAGTGAGCGGTGATTGAAAACAGACCAATAAAAGGTGCGTATTTAGAAATCAAACTTTA AAATCTAGCCAGGATTTAAATGGTCTGTTATTGAAGATCCGACACTAAATACATATCCCGCTTGTGGTGAGTAAG GATGGTAATTTAATCATAGGCTTAGCAACATATCTTTAGCAATAAAGCGATGATGCAATAGTTGCAGAAACC AATCAAAAAGTTCAAGCTCTTAACGCCACCAACAAATAGCGGAAATTAAGCGCTATTTTAAATGAAATACCGGCT GATTATCGGATAGAGTTGCCCTCTACTAAGCGCTGCAATAAGGATAAATCTTATATTGCTCTGATCCCATGTGC CCACATTTGCCAAAAGAGCTCACTAAACTTAGGATCATTTAAAGAAACACCGGTGAGAAATGGTGGTGGGCTG GCTTGGGCTCAATTCAGCTAAAGGCGCTTAAAT	498	ASVLSALLVGLGAAPKHSVSANDKRM QDNLVSVIEKQTNKKVRILEIKPLKSSQ DLKMVVEDPDTKYNIPLVSKDGNLIIG LSNIFFSNKSDVQLVAETNQKVQALN ATQNSAKLNAIFNEIPADYAIELPSTN AANKDKILYVSDPMCPHCQKELTKLR DHLKENTVRMVVVGWLVNSAKKAAL
HP0775	499	TAAAGGCGGTTTTGGCATGACATAAAGAAAGATTAAAGCGCTTTTACAAGAAAAAGCGTTTTTATAGATG ACAAATTTAGAAAACAAGCACTTAGACACACCGATGAGCGAGTTTGTGGAAAAACTAGGCGTTTTTATTAAGATC CAAGAACGCTGTGATTTGATTGCAATTTATGCAATATCCCAAGCGTGAGAGGAGGCTAGGAGTTTGAAGAGAG AAAAATTTAGAGCAAGTGGGCTTTTATGCTCAAGGGTTCAAGAAAGTGGTTTAAACCGGCACCAATGTGGGA GCTATGGGAAGATAGAGGAAGCAATATCGCGGATTGATTAAAAAATTAAGCCAGATCGCTGGATTAAACCGCAT AGGATTTGGAGCTTAGAACCTAATCAATTAACGATGAATTTTAGAGCTTTTAGAAGAGGATTTTAGAAAAACATT TGCAATCGCTTTACAGCACAGCCATGATCTCATGCTAGAGAGGATGAATCGAAGAACCGCACTAAAGCGATAGG GAATTTAGAAACAATCGCTTCTAAGAAATTTGCTATTGGCAGGATTTTATTGCGGCGATCCCGGCGAGAGCGG AAGCGTTTTGAAAAGCGTTTTAAAAATTTAGAAAGCTTGCCTTTAACGCACATCCACCTTTTATTACAGCAACGA AAGACACCCCTCTAGCTTGAATGACTGATAGCGTGAATTTGGAAGATTCTAAAGCGTTTGAATGGGATTAAGAT TTGATTTTTCATAAAAATAAGCGGTTCAAGCAATTGAGCTCAAGCTCAATACGCTCTAAAGCGCTTAGTGAAGTG CAAAAAGACGGCGAATTTAAAGCCTTAGATCAATTTTCAACCCCATTAATCAAAAGCGATAAGCCTCTAAGGGCT AGTTTTTTAGAAATCAAGAGATGAATTAAGGAGAGGAAATCATGCGTTTTTCTAAATTT	500	KGVFGHDNKEKINALLQEKRRFFIDDN LENKHLDTTMVSEFVGKTRAFIKIQEG CDFDCNYCIPSVRGRARSFEERKILEQ VGLLCSKGVQEVWLTGTNVGSYGKDR GSNIARLIKLSQIAGLKRIGSLEPNQI NDEFLELEEDFLEKHLHIALQSHDLM LERMNRNRNRTKSDRELLETIASKNFAI GTDIVGHPGESGVSFEKAFKNLESLP LTHIHPFIYSKRKDTTPSSLMTDSVSLED SKRLNAIKDLIFHNKNAFRQLQLKNT PLKALVEVQKDGFEKALDQFFNPIKIS DKPLRASFLKEIKEYEIKERENHAVF
HP0775	501	CTTCTTCGTTTGAATGAGGCTCCAAATTGACATGCGTGGGAAAAAGCGCTAAATGAGCGCAAAAGCGTAGAA AATTCGCGCCCAAAAGAAAACCTTAAAGCGCGATTTTAGAGCGTTTGAAGCGTTTGAAGAGATTCCAAAGACAC TTAAAGCGCTTTCAAGAGGCTTCAAGTCCAGGATTTGACGGCGGTATCAAAACCTTTAGACACCATTAGCATTGAATAT ATCCATA	502	SSFANEAPIDMHGGKSAKIERQSVENS AQKENSASAILERLRLKRLREYSKDLKA FQRLQVQDFDGRKIKPLDTISIEYH
HP0775	503	GATAGAAACCGAGCTTGGCATGCGTTTAAAGCGCATGGGAGTTTGTGAAAAAATCCAAAAACCCCTAAAAACA AATTCAAACCCCTAAACAACCATTCCTAAACCTAAAGAGCGGAGCTTGGCGCTTGATTTAAGGGGCGCAACGCAGC GAAGAAGCCCTGGATTACTAGACGCTTTTAAACGACGCGCTTT	504	IETELGMRLKAHGSLLKKIQKPPKNKFK PPKTTIPKPEASRLDLRGQRSEAL DLIDAFNLDA

HP0775	505	CTCAACCGAGTTAAATTTAAAGATTAGAAAAAGCCCGCGGATCGTTAGGATTATTATTGTGGCGTTATA TTAGCGATAAAAAACCAGTTTAGAAAAAGCTAAAAAGCCCTATGAATTGACTCAAAATAAAAAACAACGCCCTACAAA AGGCCATGCAAGAAAAAGGCTCAGACAAATGCAAAAAAACCCTGATGTTAAATGCTGAAGATATTTATTGCAAG CAACGGCTTTAGAAAGCATGCTAGAAACAACAGACACTTCCAAAGCAAGCTGCATCGCTTAAATCAAGAGGCTTACCCCGTCTTT ATCAGAGATTTGATAAATCCCTATTGAACCCCTTAAGCCCTTACAAATTAATCAAGAGGCTTACCCCGTCTTT ATGAAGATTAGAAATTTGCAAGTAAGCATGTAGCGCTTCTTTGTTAAGGCTAACCGCAAGTGTTAGCGCGC TTTTCAATCATTTGAGTTATGAAAAAAGCTCAAAATTTTGAAGCATATCCCATTAAGAGTAAACCGTCTTTTA GACGAAATTTATCCGGGTTTAAACCGTTGATCTATCAGGTTATTTAGATCCTAAATGGATCATTTTAAAGACGCTC TCACTAAAGTAACGCTACCCACAGCAACGCGCAACCTTTTTATTCTAGGATTAATGAATCTTTCGCAAAAAAAC CCTCTAAAGCGCTCAAGTATTTGAACGATCAGAAAGCGGTTGTCAAGACGATGATTTTCAAAAGACAGAGCGATT TTTGGCAGTATTTAGTTTCTAAAGAAAAAAGCTTTAGAACGCCCTTTCACAAAGCCCGCTTTAAATCTCTATAGTCT TTATGCGAGC	506	QTELNLDLEKKPAGIVF:DYLVWYIS DKKTSLENAKKAYELTQVKNNALQKA MKEKGSNDNAEKNPDVKLPEDIYCKQT ALESMELETTDTFOASCIALSKIRDFD KPIETLPLQIKIKEAYPVLYEELEILQS KHVSASLFKANAQVFSALFNHLSYEKK LQIFEKHIPIKELNRLLDENYPAFNRLY QVILDPKLDHFKDALTKSNATHSNAQT FFILGINEILRKKPSKALKYFERSEAVWK DDDFSKDRAIFWQYLVSKKKKTLERLS QSPALNLYSLYAS
HP0775	507	ACAAACCCCTTTACCCACCGCTCAACCCCTTTAAACCATGCTAAAAAAGCTTGAATGGGTGGAGATTGT AGGGTTGGAGCATTTGGATAAGTGATTTATTAGATCAAGCCCTCATAGGCAAAACCCACGAAGCAACCTGCCA CTTACACGGGAGTGATGATGAATCAGGATTTTATTGCGGAGCAAAAGAAAGCTAAATTTTAGGCTATAGTGCGA GCCGTTTACGCTTAATGTTAAAGGAGGGCGGTGCGAGAAATGCCAAGCGATGGGACATTAATAAGAAATGCA CTTTTGGCTGATGTGTAGTCCATGCCATGCGATAGCTGTAAAGGCGCTAAATACAAACCCCAACCTTTAGAAATCAAGGT GAAAGGCAATCCATTGCCGATGTGTGAACATGAGCGTGAAGAGGCTTATGAATTTTGTCTAAATCCCTAAAT CGCCGTGAAGTTAAACGCTTATGGATGTGGCTTAGGCTATACCTTAGGGCAACCGCTACGACTTTAAGTG GGGGGAGGCTCAAGGATCAAAATAGCTAAAGAAATGAGTAAAGAACACAGGCAACCCCTTATATTTAGAT GAGCCTACTACCGGTTGCAATTTGAAGACGTGAATCATCTTTACAAGCTTGCATCTTTAGTGGCGTTAGGCAAT TCTATGCTAGTGATT	508	QTLPTAQTLNHAHAKTQSLNGVEIVGL EHLDKVIYLDQAPIGKTPRSNPATYTG MDEIRLFAEQKEAKILGYASRFSFNV KGRCEKCGGDIEMHFLPDVLV QCDSCKGAKYNPQTLEIKVKGKSIADV LNMSVEEAYEFFAKFPKAVKLKTLMD VGLGYITLGNQATTLSGGEAQRIKLAK ELSKKDTGKTLYLDEPTTGLHFEDVNH LLQVLHSLVALGNSMLVI
HP0775	509	TCTAGCGGTGATGCCCTATAGCGAGCGGATTGGGATGCTTCAATCAAAATGAATTAGAAGACAAGAGCTTTT ATTATATTTATCCAGAAGAGTATAAAATATCAAGGAATATTTGCACAAAAACAAGCAGTCTTTACTCTTAAAGCTCAA CGCTTTGCGAGCAAGTTAGAAAAAAGCTTTTGTAGTAGGGTTAGCCATTGGATTTAACTCGTTACAAGGGT GAAACGCCCTTATCTATCTATCTAAGATGCAACGAAAGGGCGGTTAATATGATGAAATTTTGACTTGTAGC CATTAGGATTTTATTGAAAAACCGGATTGATGCTATAAAGTTTAGGGATTATCCATTGAATTTCAAAACCCATTGCT CTCGTTTAAAGATTACATCGCTTTGCCCAAGAAAAATGGCTATAAGACGATACACAGCACCATTTTTGATGAATCTTC TGTTTATGAAGTGCAGATCCGCAC	510	LAVYAPIASRLGMSSIKNELEDKSFYI YPEEYKNIKEYLHKNKQSLLLKLNAFAS KLEKKLFDGSGFSDFKI.VTRVKRPYSI YLMQKRGAVNIDEILDLLAIRILLKNPI DCYKVLGIHLNFKPIVSRFKDYIALPKE NGYKTHITTFDESSVYE/QIR
HP0775	511	CTTAAGGAGTTTGAACACCCCTCACCAAGCGCTTCAAAATCCAGTATTTAGGCTCAAGCTCTCTAAGAGAGCCAAA ACCTGGCGAATCGCGTAGCGCATACCGCATGCTTTTTTTTGTGATGAATGCTCATTTTAAAGGATATTTTGGGA AGCTTTAAGAGAGCCTTTAGAAAAACAATAAATTGGTGTTCAGAGTGCAAGCAAAATGAATACGAAACCTCTTT TTTATTTGAGGGCTCAAAACCCCTTGTGTGCGGAATTTACTCAGCGGACCAAGCATGCCGTTGCCAAGACA GAGAAATCACGCAGTATAAAACCCGCTTGAAGAGGCTTCAAAAGAGATGATGAATGGTGTATTAGCTTTCAAGCAG GGGAATTATAAGACACGCGCTCGCATCTTGGACTTCAAAAGAGATGATGAATGGTGTATTAGCTTTCAAGCAG CAAAAGTTAAGGAAACAGAGCGTTTATGTAAGCTTAAATGAAGAGCAGATAGAACGATTTGCCCTTAAACGCT GAAGCAAAAAGTTGTTGGAGCAGCGGTTGAAAGGTTTAAATCTCTCCATGCGCTTATTAATAAGGTCAAAAAAGT CGCTAGGACGATTGCGGATTAAACGCTTGCAGGATATAGAAAAATCTCACATGCTTAAAGCGCTGAGTTTAGAA AGATTCTTAAAGGATTTTATAAGGGAGAAAAAATGCAAGAAATACCACATTCATAATTTGGATTGCCCTGATTGTGC GTCTAAATTAGAAAGGGATTAA	512	LRSFRNPQSASKSSILGSSSLREP GEIALAHNGMLFFDELPHFKKDILEALR EPLNNKLVSRRVHSKIEYETSFLVGA QNPCLCGNLLSATKACRCQDREITQYK NRLSEPLDRIDLFOVMEEGNYKDTPS HSWTSKEMHELVLAFKQKLRKQSV FNGKLNQIEFCPLNAEAKKLEQA VERFNLSMRINKVKVARTIADLNAC EDIEKSHMLKALSFRKIS

HP0775	513	AAATAGGGCTAAGAGGGATTAAAGATGTTAGCAATGGCTGGCAAAACAAAAGCACTGAAGCAGCACCCAAAG AGAGGGTTTAAAGCGATGAAGAAATCAACAACAGGGCTGAAGGATCGCTAAAGCGAGTTAGAGAAGGATACGAA GCTCGTTTCATCACACGATCAATACGAGCGCATGAAGAAAGCGGATCGCTCAACACGGAACCTTAGATTGCGACA TTCAAGCCAAACAGCTTACAAGAGCTGAATCAAAAATTGCTCCAATTCTGGGCGGATAGGAAGTATATGCCCTAG ACTAAAGCGGTGCAAAATTTCTTGAATAACCCCAATCTTAAAGATTGGAAGTATTGACACCCAGGAGTGAATGAC CCCATCGCTCCAGGGAAGACGCAACCAAGCCTTATTGAAAGATTGCGATGTTGTTATCATAGCTCTTCTAAT CAGTTTTAACGGAGAGCGATATGAGTTTGTGACAGGTTTCTAACAAAGAAAGCCTTCAAGAAATTTATTTGTG GCAAGCCAAAGCCGATAGCGCTGTTCTTCTATGATGAGTGAAGTGAAATCTCGCCACCCCTCCC	514	INRAKEGKVNKWLKGNKSTEAAPKE RVLSDEEINNRAERIAKSELEKDTKLVS SHDQYERMKKGSLNTENLDSHIQAN SLQELNQKLLQFVGADRYKMPYTKAV QISLNNPNLKDLEVIDTPGVNDPIASRE ERTKALLKDCDWFISSSNQFLTESDM SLFDRVSNKESLQEIYFVASQADSAVL SMSEVEKSRHL
HP0775	515	GCGAGTTAGAACCCAGATCACAGACGCTCTAAACCCCTTAGAATTTATCAAGATTTTAAAGTTGGATATTG GGAGCGGGGGGACTCCCTGCTATCCCTTAGCCCTTGAAGAACCTGAAGTCAAAATTCATCTTTTAGAGCCAAAGA ATAAAAAGAGCGGCTTTTAACTACCTTAAAGCGTTTGCCTTAAATAATTGAAATCATTAATAAGCGTTTAG AAGATTATCAAAATCTTTTACAAGTGGATTGATCATTCCAGAGCGGTGCTAGCTCTCTTTTGTATAGAAAAAG CCAAGCCTTCTAAAGATAAGGGTATTTTATTCTATAAGGCGAGCAGTTAAAGATGAAATCGCTTGTAAAGA CACTGAATGCTTATGCATCAAAAACGAGTTATTTTACAATCAAGGA	516	ELEPQITDALKPLEFIKDFKSCLDIGSGA GLPAIPALEKPEVKFILLEPRIKRAAFL NYLKSVPPLKNIIEIKKRLDYQNLQVD LITSRAVASSFLIEKSQRFLKDKGYFL FYKGEQLKDEIACKDTECFMHQKRVYF YKSK
HP0775	517	ATTGCAAGCCTATTTGACGCTTGGGAAGCATCAGCGCGCTTAAACCTAACCGATGTTTAAAAAAG ATTTGATTGTTAGAAATATCGCATTAGGACAATAGGCATTAAATAATCCTACTCATAGACATTTGGCACCCTAATG GATTAAAAATTACCGACTGATCCCAATATCCCTGAAGCGTTATCTATGTGCGCAAGCTTTAGACGAGAACAACCA TTACAAACAGGCCATGCGTTATTACAACGCAATCTTTAGATAACAAGAACTCGCGCTACGCTCTTTAGCCCAAT GCGTTAGCCATTGAAGCGGCTGAAGGCTCTGATTGAGCAACGCTAACATGCTTTTAAAGAAAGCTTTTCTAACCG CAAGACAAGAGAGTGCGAGTGAAATCGCGCTTAATTGGCTGAAGCAGAGATAAACTATCAAAATTTTAAACG CTAATACCTCATTTAGATAGGTGGTCCATCCACCTGATTATATTCTACGCATAGCGAATCAGCCCTAGACTTGC TCAAGTTATTGAAAAAAACCAAGATGAATGAAGCGCGGATGAGATCGCTCACTCTCAATCAAGATGATGATC TGAAAGCTAAGAGCAAGCGCTTATGATTAGGAGCGTTGTATGCAAGGATCAAGGACTTAAACACGCCACCTT TACAATCTGCAATATTGACGACCATGCGGAACCTGGATAAGCTTCTGCTTAGGGCGCGGATGAATAAGGCCCT TTTTTCCATGGAGGGAACACGCAAGAAAAATCGCCCACTATGACAAATCATTCAAAATTTCCCTAATCTAATGA AGCCCTAAAGGCTTTAGAAATTGAAGCCCAACTATTGTTTGAACAAAGCGTTATGCTGAAGTGTAAAGCATGCAAAA AAATTTGCCCTAAAGATTCCCTTTGATCCAAAAACGCTCAATGTCCTTGTAAACCCCATTAGAGAACCATCGTTG TGAAGAGGCTT	518	SQAYFDALRTISRAFKNYPQTMFKDL YLLEIALGQLGKKSLLIDIGTQWIKNYP TDPNIPEALYYVAKALDENNNHYKQAMR YYKRILLEYNRYAPLAQMRLEIAEAE GSDLSNANMLFKEAFSNAKOKESASEI ALNWAEEIYQNFNNAKYLIDKVVQS NPDIYISTHESALDLLKLLKKNQMNAS AIEIAHLLNQDDDLKAKEQALYDLGAL YARIKDFKNAHLYNLQYLQDHAELDKA SWVRARDEKALFSMEGNTQEKIAHYDK IIONFPNSNEALKALELKAQLLFENKRY AEVLSMQKNLPKDSPLIQKTLNVLAKT PLENHRCEEALKYLSQITTFEFSPEEI QAFDCLYFAS
HP0775	519	GCAATTAAGGCATGTGAAAGATCTCAAAAGCTTTTAAAGCATGCCAGAAAAACTTGCCTTACGGCTAAATTTGA AATTGAATGCGAAAGCTTTGAAGAGGCCCAAAACGCCATGAATCGGGAGCGGATATTGTGATGTGCGATAATTTGA GCGTTTATAGAGACTAAAGAAATTGCCGCTTATAGAGATGCGCATATCCCTTTGTTTACTGGAAGCGAGCGGGAAC ATTTCACTAGAGAGCATTAACGCTTACGCTAAAGCGGGGTGATGCCATTAGCGTGGGCTTTAATCCATCAAGC CACCTTTATTGACATGCACATGAAATGGCTTAAAGACITTTAAAGGGGTTATTAAACATGCTAAAGAAATATTAGAA AGCATTAAGATCTTACGCTGAAAGAAATGAATCACTCAGCACCGCCCTTCTTTATACAACCTTCTTAATCAGTTAAAA AAC	520	HLRHVKOLKSFLTHARKNLPFTAKIEIE CESFEEAKNAMNAGADIVMCDNLSVL ETKEIAAYRDAHYPFVLEASGNISLES NAYAKSGVDAISVGAHQAATFIDMHM KMA

HP0775	521	GCAAAAAGACGCTTGGGGTTCATCTATGAGATCAGCGAGTTTCATGAAAGCCTATACCGCATTCGTAATAAAACAA GACCGATACGTCATTTATTGAGGTATCTCCCTCTAGGTATTGGCCAGCATTTTAACGACTGCCCTTTATGTCAAA TACCTGATTTGACGCTTTGAAAAGCTTTGGTGCTTATTATTACCAAACTGGATTGCAGGACGATCAGCAG CGCATCAAGCAACCAAGTATCAACATTATCAAAAACGTTAAAGCAATAAGAGCGTTGAAACCATCAAGAGAGCTTATA TTGAATAGCATCGACTCTTATAACACCTTTGATCAATACCTCTATAACTTATGGGATAGCTCTTCTGTTATCATAGCA AATGGTGCTGCTGCTTAGCCCTAGCTAATTATTTTCATGGCAGATGAAGAGAAACCCCATTTATCGCTATGGATG CCGAAACCCCAAGTGGAGCATATTTTGCACAAACGCCCAAAAGAGCGAGTCAATGGAACCGCGATGCTTTGACAAAGA AAAAAGAGAAGAAATGGTAAATAATATCGGAATTTAACCTTTTAAAGCGTAAAGAACGCGCATGCTTTAAACGG GGATTTTGATGAAAAAGAAAAATTTATGGAGGCAAGACACGAGCAAGTGAATAGCTGTTATGACATCACTAAAGA ATTGTATAGCAATTATAGGAAGTGAATGAGAAAGTCCCTCCAGAGCGGATACAAATCTTTGTATAACACTATCACGCC TGTTTTACACATAGAGGGGCAAGAGATGATTTTGAAGATGATTTGATCTAGAAATGATTAAGATGCTCAAGCATCA AAACAACAAAGAGGTGATCAATGCCTAAAGAGCTATTAAAGATGTCAAGAAAGGATTTTAAAGACTTCTTAA AGAGCCCAACAGCACCCCTATTGTTTTCTATACAGATAATGATGTGATGCGCATGTTAGCTGCGCAGCGTTTAAAT GTCTATGTGTT	522	KKDACGFIYEISEFMKIYATALLKKQDRY VYLLRYLPSRYWASILTTALYVVKYDPDFD ALKKLLVSYYYQTWIA3GTTTRIKQTSIN IINKVSNKSVETIKELILNSIDSYNFTDQ YLYNLWDSSSVYHSHKMWVRPVLALANY FMADEEKPHFIAMDAE:TQVEHILPQTP KRGSQWNADFDEKEKIEEWNNIANLT LLKRKNAHALNGDFDEKRKIYGGKDT SKVISCYDITKELYSNYRKWNEKSLQE RYKSLYNTITPVLHIEGQEDDFEDFDL E
HP1489	523	TTTGAATTTGGCTGAAGACAGCGCGCTTTGAACCATCCTAACGCTCAAAAACCTCTCTTAAAAACGCATGGACTAG GGTATTGCTAACCATGAAGGCTTGCGATGCGCAAGATACGCCATTAAAGCGAGGAGTAAATGAAATTAGCGGCTA AACTTTCTTTTTGCGCTCAAATGATTGAGCGCTTTTATGTGATCTCTCTAACCCCATTAATAATGGATTTTGCCAGC CAAAAACACCGGGCGT	524	LNLAEDSAPLNHPNACKLSLKNWTR VLSNHEGLHAQEYAIK'RASKMKLAACL SFLPQIDLFAFYVYLSNPIKMDFAQKQ PG
HP1086	525	ATAACGAGTTACAATTTGTGTTTTCAGGCTGGGTAAAAACAAGGATTTGTATGCGGTCAATGTTTTAAGATCCGTG AAGTGTGAATACCATGGCAATCTCACCATCATTAAGCAAGAAACAATTCGCTCGTTGAGGGCTAATCATATAA GAGAACTCACCATTCCCTTGATTGATAGAAAATGGTTTTATTATGACAGCCAAACAACAAAGGATTTACGCC CTTATAGGATAGAAAAGAAAAGCGGAGATGATATTGTTGAGTTTGTGAGTTTCTCGCTGGACTATAGGGTTA GGATCTATGAAGCGGATAGGATTTGAGCAAGAAATGGAATGGAAGCAAGCGCTGGCTAGGGGATCTGC AGGCAATAACAACCTCGTGAGCGGACGCGCTATTTGATGGCGCTTGGTCAAGTGGTGATATTGAAAAAATG CTTATAGACGTGTTCCCTTGATTGAAGATGAAAACACACGATTTAGAGACGCTTTCTAAATCCATTCTAACCAAT GCGTTTTGCTTGCTGATGACTCCCAAGCGTTTTGAAAACCATGCAATGATTTAGACAAGCTGGCGTCAAGCAT ATAGATTTTATCAATGTTAAACCTTACTAGAGCATTTTCAACCCCAACCGATGTAGTAATATTGGCCTGATTA TTACCGATTTGGAATGCCAGAGCGGCGGTTTTGAAGTGATCAAGCAGGTTAAAAACAATCCTTTGACTTCAAAAA TCCCTATCGTGGTCA	526	NELQLCFRLGKNKDLVAVNVFKIREV VKYHGNLTISHENNSLVEGLIIRELTIP LIDMKKWFFYYDSQNKNDLRPYRIEKE KGEDDIVMICEFSRWTIGVRIYEADRI SKKWTEMEQSAAGLGGAGNNKLVS TRYFDGRLVQVWDIEKMLIDVFPWIEDE KHNDLETLSKIHNSQC'VLLADDSPSVL KTMQMILDKLGVKHIDI'INGKTLEHLF NPTTDVSNIGLIITDLEMPASGFEVIKQ VKNNPLTSKIPIV
HP1086	527	CGCTCTATGCGGGATTGCGTGCGGAATTTGTGCATAAAAATTCAGGGATCACGATAGATATTGGAGGGGTAG CACCGAGTGGCGGTTGATTGAAAAAGGCAAGATTAAAGGACTTAATCTCGCTTGATGTTGGACGATTCGCATTAAAG AAATGTTTTTAGACAAAGACTTAGAGGTCAAATGGCTAAAGCCTTTATCCAAAAGAGTCTCTAAACTGCCCTTTAA ACACAAAACGCCCTTTGGGTGGGGACGATCAGAGCGTTGAGTAAGGTATTGATGAAACGCTTTTGTACCCCT ATTGATTTCTTGCTGCTATGAATAGATGCACATAAAAATTTAGCTTCAATGAAAAATCGTCATGCTCAAGAAG ATCAATTACGGCTTTTAGGGTGAATGAAGAGCGTTTGGATAGCATCAGGAGCGGCTGATTTTATCAGTCGT TTGGAGCATTTAAAACTTCTTTAATGATCACTAGTGGGTGGGTGAGAGAGCGGTGTTTTGAGCGGATTTAT GCGCCATCATTAACCATAAATCCCCCAATATCAACCCCTCTCTCATCTTTAAAGATCGCTTTTGGCCCATGA AAAGCACAGCCAAAGGTCAAAAAGAAATGCGTGAAATTTGTTGAAGCCTTATCGCCTTGCATAAAAATAGATGA	528	LYGGIACANLLHKNSGITIDIGGGSTEC ALIEKGKIKDLISLDVGTIRIKEMFLDKDL EVKLAKAFIQKEVSKLFFKHKNAFGVG GTIRALSKVLMKRFCTY'PIDSLHGYEIDA HKNLAFIEKIVMLKEDCLRLGLGVNEERL DSIRSGALILSVVLEHLJTSMLITSGVG VREGVFLSDLLRHHY-KFPPNINPSLIS LKDRFLPHEKHSQVKKECVKLFLEALS PLHKIDE

HP1086	529	CCGATAAGGGATTAAAAAGGTGTTCAAGACAGCAAAAAGACGCTTGGGGTTCATCTATGAGATCAGCGAGTTC ATGAAAGCCTATACCGCATTTGCTAAAAAACAAGACCGGATACGCTCTATTATTGAGGTATCTCCCTCTAGGATTGG GCCAGCATTTTAAAGCACTGCTTTATGTCAAAATACCTGATTTGACGCTTTGAAAAGCTTTTGGTGCTTATTATT ACCAAACTTGATTGAGGAGGACGATCAGCGGATCAAGCAACCAAGTATCAACATTATCAAAAACGTTAAAGC AATAAGAGCGTTGAAACCATCAAGAGCTTATATTGAATAGCATCGACTCTTATAACACCTTTGATCAATACCTCTATA ACTTATGGGATAGCTCTTCTGTTTATCATAGCAAAATGGGTGCTCTGCTTAGCCCTAGCTAATTTTTCATGGCAG ATGAAGAGAAACCCCATTTTATCGCTATGGATGCCGAACCCAAAGTGGAGCATATTTGCCACAAACGCCCAAAAGA GGCAGTCAATGGAACCGGATTTTGACAAAGAAAAGAGAAAGTGGTAAATAATATCGCAATTAACCTTTAACCCTTTTA AAGCGTAAAGAACGCGCATGCTTTAAACGGGATTTTATGATAAAAGAAAATTTATGGAGGCAAAAGACACGAG CAAAGTGATTAGCTGTTATGACATCACTAAAGATTGTATAGCAATTATAGGAAGTGAATGAGAAAGTCCCTCCCAAGA GCGATACAAAATCTTTGT	530	DKGLKKVFKDSKKDACGFIYEISEFMH AYTALLKKQDRYVYLLRYLPSRYWAS LTTALYVKYPDFDALKLLVSYYYQTV AGGTITRIKQTSINIKNVKNKSVETIK LILNSIDSYNTFDQYLNLWDSSVYH KWVRPVLALANYFMADEEKPHFIAMD AETQVEHILPQTPKRGSQWNADFDE KREEWVNNIANLTLLKRKKNALHNGD FDEKRIYGGKDTSKVISCYDITKELYS NYRKWNEKSLQERYKSL
HP0071	531	GTTTAGAAGACGTTTTATCCAGCATTCCTAAAGATACGCCCTTATCGCATAACCCCATTTTTTGGCAAGTGGTGATCC ATTTGGTGTGTTGTCAGCGCTTTTAGCGCGCTTACCAATAACATCGCTTTTTCGCAAAATAAAGCGCATTA AGTTTTAAAGCTCTTTTCAGGAAGGACTTTAGACCATTTTAAATCAAGCGCAAAAGAAAGTGTCAAGCGGAAG TTTTTTCATGGATTAAATGCTTCTTCACCGCTTCCCAATCACTCTATGCCGATACACCACCAATGCCATGATTG TTGGGCATGATCTTTAAGCGACAAACGCACTTTTAGCAAAAGACGGTTGTCAAAACAAACCGCTTTTCAGTGT TGATGTATGACAGCGCGGATCAATATTGAAACTCCCTAGAACGCTTAAATGTGCATCAAAACAAATCGCTTGCCAT GCAAGGAATGTTTGGTGCTAAAGCGCCCTTTAATCTGGCGGTTGAAAAAATCGTTTCGTATTTCATAGACATTCGCGC CCATTGCGCACTA	532	LEDVLSIPKOTPLSHNPIFWQVVIHLV FVCSALLAAVTNNIAFSQNKAH
HP0071	533	TGCAAGCCTTGATGAAAAACGCCCAAAACCGCCCTTAAATGCAAAATAACCAACAGATTGAAGTTTAGTGGATA GCATTGTGTTGGGGATATTCTAAAGTCTCTCCCTGGAAGCGGATTCGGTGATGGTGAATCATAGAGGGCGA AGGGGAATTAGATGAGAGCATGTTGAGCGGCGAAGCGTTGCCGTTTATAAAAAGTCGGCGATAAAGTCTTTTTCAG GGACATTCATAGCCACACGAGTTTATGAAGCGCACGCAAAACAAACAAACAGCACCTTGTCTCAAATTATAG AATGATTTATAACGCTCAAAGTTCAAAGGCGAGATTCTCGCTTAGCGGATAAGGTTTCAAGCGTGTGTTGTGCCAA GCGTGATCGCTATTCTATTATAGCGTTTGTGGTGCTCATATTGCACCTAAGCCGATTTTGGTGGAATTTTG GAATCGCTTTAGAAGTGTGTTATCGGTTTATAGTATTCTTCCCTTGCCTTAGGATTGGCTACGCCATGAGCA TTTTAGTAGCGAACCAAGCGAGTTCTTAGGGTTATTTTAAAGACGCTAAAGTTAGAAAAAGCAAGGCTAG TCAATACGATCGTTTTGATAAAACCGGACGCTCACTAACGGCAAGCTGTCTTAAAGCGTTTCACTTAAGATAG AATTATTAGATTATTGAGTTTAGCGCTCAGTATTGAAAGAGTAGCGAATGTCTATCGCTAAAGGGATTGTAGAA ACGCAAAAGAGCATAACGCTCCCTTAAAGAAATGAGCGGGTTAAAGTGAAACGGGTTTGGCATTAGTGCTAA ACAGATTATCAAGGCACTAAAGAGATTATTAAAGTAGGCAACAGCGAGTTTAAACCTATTAAACACGCTAGAAATT AAAGAAACGGGATTTTAGTGTGTTGTTAGAGCGGATCAGTGAAAAAGAGACGAGCTTTTAGGGCGTTTGTGTTT AGAAGATTGGCCAA	534	QALMKNAPKTALKMQNNQIEVLVDSI VVGDLKVLPGSAIADVGEIEGEGELD ESMLSGEALPVYKVGDKVFSGTFS HTSFLMKATQNNKNSTLSQIEMIYNAQ SSKAEISRLADKVSSVFPVSVIAISILAF VWLIAPKPDFWNNFGLAEVFSVLV ISCPGALGLATPMSILVANQKASSLGLF FKDAKSLEKARLVNTIVFDKTGTLNKG PVKSVHSHKIELLELLSLALSIEKSEHV IAKGIVEYAKEHNAPLKEMSGVKVKTG FGISAKTDYQGTKEIKVGNSEFFNPINT LEIKENGILVFVGRAISEKEDELLGAFVL EDLPKKGVEKHEIAQIKNLGINTFLLSGD NRENVQKCAFELGIDGYISNAKPQDKL NKIKELKEGQIVMMVGDGLNDAPSLA MSDVAVVMAKGSQVSVQAAADIVSFNN DIKSVYSAIKLSQATIKNIKENLFWAFCY NSVFIPLACGVLYKANMLSPAIGLAM SLSSVSVLNSQRLRNFKIKDH

HP0071	535	ACTTAAATCTGTAGTGGGCATTGATTACGCCGCTCTTTTATAGCCATTTCAAATGTGGCAAGCGTATTTT TTAAACAAGCGTTAAAGAGCAATACCTTTTGTGTTTATATCGCTTTTCAAGTGATTTCTATTCATTCATTTT AAAAGCCTCTAGTTATAGCCAAAATCGCCTTGAGTTGCTTGCTGTTGAGCGTTAGCCCTTATTCGCTTAG CAATATCCCTTATTGTTTCATAGGGGTGATCGCTCATGGTGGCTTTTCACTTACATGAGCTATTGCTTAACTAT CAATTCTCCAAATTCGTTTCTAAACAACATTTCTCGCTCATCGCTTTATCAAGCTGTGTGCGCGTGGTCTCT GTGCTAATCTTATCGCTCAGCAGTCTGGAACCTGCGTTACTTCTACCCCTAACCTATCATACCATGCTTTTGCCTTG ACGCTTATCATCCTCTTTTCTTTTGTATAAGGCTAAGCCGTTTGTAGTGAGCGGCTTTAAGAGTGCAACCTTTTA GCGATTCTATAGCAACATCATAGCCATGGTTTAAAGCGGTAGCGATGCTCGCCCTGATTTGAATAAATATCGCC CAGGATGAAC	536	ILKILLVGHLLTPVFFMSHFQMWQAYFI QGVKEQYLFVYIAFQVISILHFLKAS YSQKIALSSLVLLGVSPLLSNIPYCF GVYALMVAFFTYMS'CLNYQFSKFV KNNISSLSLLSSCVRVSVLILSLSL LRYFSPLTIITMHFALTLILFFFLYKAKP FDE	02/06/2020
HP0071	537	TTTGCCCTTATTTAAGAGACATCGTAACGCGCAAAAATCGCCCTTGATGATGAAGACAATTCCTTCTCTAGGCA ATTAGCCTTCATGGCGCAAGCTCCAACGAGTTAGAAATCGCTTTTATAGCCCTCTATGCTGGAAGCCAAAAGCT TTTAAAGAAGAAAATTTATGGGATCTTGACATTCCTCTCATTTTGAAGCCAATATCCATAAACAAGTGCCTGTA ACGATAGATTTTATCGGAATTCCTTACTTTTGTATGTTGCTGCTAGCGAATGCGGTGGTGGAGAGCATCAAC GCTTTAAATGATGAGATAAGGTTCAACGCAATGCCAAATAGAAAGCTGAATTAGGACAGACGGGATTTAAAT CAGGCCATCGCTTATATAACCCCTAGTGAGGGGTATTTGAATTACGGCTCTCTAGCGTGTATTTATTTTCATTTTGCA CCAGGTGATGCTCATTTGCAAGCAGCATGTTTACTAGCTCCAG	538	LPYLRDIVTQKIALVDEDNSFLSRQLA FMAQSSNELEIAFFSPSMLEAKLLKE EKYGLHIPSHFEANIHKQVPVTIDFYA NSNYFLYGALANAVVESINALNDEIRF KRNAQIEEAELGTGKIRPIALYNPSE GYLNYALSSVFILHQVMLIASMFTS S	
HP0071	539	AACGCATTGTAAACGCTGCTTGCTCAATCAAAAGGTTTAGAACGTTTAAAGTGGGTTAAAAAAGTGAGCGTGA ATTTACACCCACCACCTTGCAATCGTGTGAGAAAGTCTTAAACCTTAAAGAGATTATTCAAAAAATTGAGAGTTT GGCTATGGGCTAAAATTTATAATGCGCAAAATTACACCTTAAAGCCCAAAAGAACAGCGCTCCTACTTGCTCA CTTGAGCGTGGGTTTTTGCCACTATGAATTTGATGTTTATCGCATTGCCAATACGCAAGTTATGGTGGCGCAA GTTATGGCGTGCGAATATGGCGCTGGCATGGATAAGCTTATGCAAGGAATTTGGATCTCGTATCGCTCTTTT AGCTTGTGGTGTAGTGGTGTGGGCGTTTTTCAATTAAGGGGCTTTTATGGCTAAAAAATGGCGTTTGGG CATGGAATTTGAGCGTGTCTTTTGAGCGGTTATCGCGGTTTGTATTCGCTTATGCCATGTTGGTGTCCCAAGAGAC TTATTTTGAAAGCGAGCAGCAGGATTCTAACGCTTGTTTTGGCTCTAAGTTTTTGAATTAAGGCCAGGCTGTTTGC GAATGAAAAATGTCTGGCCCTAGAAATCGCATGAATCCATAGCGTGATCGTTGTAGAAAAATGGCAAGCAACAGAAA AACACCTTAAAGATGTGGCGATAGGCTCTGTTTGGTGCCAAAGCGGGCTAAATCGCACTAGATGGCGTGCT TTTAAATATCGAGCGTGGATGCGTCTTGTATCAGTGGGAGTTTAAAGCCTTGGAAATGGGGTTAATGATCCAA TTTTAGGGGTTTATGTGAATGTGGCGTGCTTTTATAGCTATCAAGTGAGCGCTAATTTTCAAAACTCACGCCCTTCTG GTTTGTAGAAACTTTTAAAAAAGAGTTTTTTAGAAAAAGCCCTTAATTGAGAGTAGCGCGAATCAAATTCGGGATATTT TTCTAAAGCGGTGTTG	540	THCNACLWLNQKVLIERLSGVKKSVN FTTHLQVFEKSLN'KEIQKIESLYG AKIYNAQNYTLKAQKEQRSYLLTSLVG FFATMNLMFIAIAYASYGGASYGGAN YGAGMDKLMQORNLDLVSFLSLVLV VGRFFIKGAFYGLKNGVLGMDLSVSFG ALSFAVYSVYAMLVSQETYFEASSTILT LVFGSKFLELKLARLFANEKCLALESHEI HSVVVENGKQTEKH'PKDVAIGSVVWV PSGAKIALDGVLLNNASVDASLISGEFK PLELGVNDPILGGYVNVGVPFYSYQVSA NQNRLSGLLETCLKSFLKPLIESA NQIADIFSKAVLFLAFVSFLLWQFGLGG NFEKALMVCISVLVISCPCAFALATPIAL VIGVFNPLIVFKEALFLETAKVKKIFID KTGTLTQKEVLLKEKIIEEFEDGRLLKSL LKVREHLAHSAILKSLDGDEVSLKIEF FAHGLKASYQNETLLVGSLLKFLGSMGV DIPMKESANIMVGFKNETLCALFILEE RLKANAKEVVQALQKGLLEILSGDN ESSVKECAKKLGISNYHAHLTPEDKAC TISSYKGVCAAMVGDGNNDALALKQAST VSLGFEKSALSKSACDILLLEEDLSLLK KAFONAKQVYQVVLQNVLSLYNAILIF VAMLGYNPLIASLSNISASSLLVVLN	

HP0687	541	ACAAACCCCTTTACCCACCGCTCAAAACCCCTTTAAACCATGCTAAAAAACTCAAAAGCTTGAATGGGTGGAGATTGT AGGTTGGAGCATTTGGATAAGATGATTTATTTAGATCAAGCCCTCCATAGGCAAAACCCACGAAAGCAACCCCTGCCA CTTACACGGGAGTGATGAATCAGGATTTATTTGCCGAGCAAAAGAGCTAAATTTTAGCTATAGTGGCA GCCGTTTATAGCTTTAATGTTAAAGGAGGGCGGTGCGAGAAATGCCAAGCGGATGGGACATTAATAAGAAATGCA CTTTTGCCTGATGTGTAGTCCCAATGCGATAGCTGTAAAGGCGCTAAATACAAACCCCAACCTTTAGAAATCAAGGT GAAAGGCAATCCATTGCCGATGTGTGAACATGAGCGTGAAGAGGCTTATGAATTTTGTCTAAATCCCTAAAT CGCGTGAAGTTAAAAACGCTTATGGATGTGGCTTAGGCTATATACCTTAGGGCAAAACGCTACGACCTTTAAGTG GGGGGAGGCTCAAGGATCAAAATTAGCTAAAGAAATTGAGTAAAAAGACACAGGCAAAACCCCTTTATATTTAGAT GAGCCTACTAC	542	QTLPTAQTLLNHAKKTQSLNGVEIVC EHLKVIYLDQAQPIGKTPRSNPATYTCN MDEIRILFAEQKEAKILGYSASRFSFN KGRCEKCGDGDIKIEMHFLPDVLY QCDSCKGAKYNPQTLKIKVKGKSIAD LNMSVEEAYEFFAKFPKIAVKLKLTLML VGLGYITLGNATTLSSGGEAQRIKLAK ELSKKDTGKTLYLDEPT
HP0687	543	GCAAGAAGTGTGCTTAATGTGAAAAACCCACCTTTTGCACAATGAAGAACTGAGCTCTTTAAGTATTATTATTAGAA ATACGACTACACGAGTATTTAGCGCTCCTGGTGGGAGCGAGTTGTCTGGAGTGGGTGGTGATGCAAAACGA TTTTAGAAACCCCTTAGTGATCCCTTTTACTAGGATTTCTAGCGGCGATGCTAGCGGTGGCGATGGCGATA GCGTAGTGGAGCTAACATTCGATTTTGGCGTTTGGCGGATTTAGTAGCTTGTCTGCTTTTGGCGATGAA TAGGTTTGGGTAATCCGTCCTTTGCTGCTTTCAGGGGTGTTGAGCGGTTTTAAGCGCCTTAGCCG GAGCGATAAAATCTTGTGATCCCAAAAGCGCAAGCGATTTGCTGTGGCTTTAGGGAGCTTGTGCTTAGC AGTTATAAGGATGCTTATGATCGCTTTCATAGGCTTATAGGCTTATCCGCTTTTGTAAAGGTGGCGCA	544	QEVCLNVKNHFLHNEELSSLSIILIRL PRVILALLVGASLGGSGVVMQTIFRNPL VDPFLLGISSGAMLGVAAMAVVESNIA ILAFFGAILASLAVLAMNRVLGNSVLSL VLSGWLSAFLSALAGAIKFFVIPQKAQ AIVWLLGSLSSSYKDCIAFIGLSLGF IPLFLLRWR
HP0687	545	TTGCGGTGGATGGTGAATCATAGAGGGCGGAAGGGAATTAGATGAGAGCATGTTGAGCGGCGAAGCGTTGCCGG TTTATAAAAGTCGGCGATAAGTCTTTTCAGGGACATTCATAGCCACACGAGTTTTTAAATGAAGCCACGCAAA ACAACAAAACAGCACCTTGTCTCAAAATATAGAAATGATTTATAACGCTCAAGTTCAAGGCGAGAGATTCTCGCTT AGCGATAAGGTTTCAAGCGTGTGTTGTCGAAGCGTATCGCTATTTCTATTAGCGTTTGTGGTGGCTCATCAT TGCACCTAAGCCGATTTTGGTGAATTTTGAATCGCTTTAGAAGTGTGTTGATCGGTTTAGTGATTTCTTGCCCG TTGCGCTTTAGGATTGGCTACGCTATGAGCATTTTAGTAGCAACGAGAAAGCGAGTTCTTTAGGGTATTTTTAA AGACGCTAAAAGTTTGAAGAAAGCAAGGCTAGTCAATACGATCGTTTTGATAAAACCGGACGCTCACTAACGGCA AGCCTGTCGTTAAAGCGTTTCAATCTAAGATAGAAATTATAGAGTTATTGAGTTAGCGCTCAGTATTGAAAAGAGTA GCGAACATGTCATCGCTAAAGGATTTAGATAACGCAAAAGAGCATAACGCTCCC	546	AVDGEIEGEGELDESMLSGEALPVYK KVGDKVFSGTFSNHTSFLMKATQNNK NSTLSQIEMIYNAQSSKAEISRLADKVS SVFVPSVIAISILAFVWLIAPKPDFWW NFGIALEVFSVLVISPCPCALGLATPMSI LVANQKASSLGLFFKDAKSLEKARLVN TIVFDKTGTLNGKPVWKSVMHSKIELLE LLSLALSIEKSSSEHVIAKGIVEYAKEHNA P
HP0687	547	TTATTTATTAGAGGATCGGTTTCAAAATTCATCAAAACCCCTTTAAAGAGCAAAACAGCACCTTTAAAG	548	IYLEDAFQKFIKTPLKEQNSTTLK
HP0687	549	TGCTAAAGCCCAAGCAATGCCTATTGTTTGCAATTGCATGCCCTATACATGAAGAAACAATTACACGCAATACCT TTTAAGCGTGATGTGCTTGCTGCTCATTTTATGCGATTGGCATGCTCAATTTCAATCAAAAGCCCTCAAC ATCGGAGAGCTTTGATCAGTATTGTAGCGAATGTGTGTATTAGTTTGGGGATGGCATGGCGTTTATTTT AATCICATTGGCATGGAAGGCAATTATGGCATTTGTCATTTGGCGGTAGTTTJA	550	AKAQAMPVIVLQHALYNEENNYTQYLL SVMLPCMWLIFIAIGMLNFIQKASNMRE LLISIVANVCVFSFWGMGMMAFYFNIG MEGHYAHLVFLAVVL
HP0687	551	GATAGAGTTTTCGCTCATGCTGCTGAAGCGAGCTATCAAAACGAAACCCCTGCTAGTGGGAGTTTGAAATTTTGG GATCTATGGGGTGATATACCAATGAAGAGAGAGCGCTAATATCATGGTAGGCTTTCGGAATAATGAGACTTTATGC GCGTTATTCATTTAGAGAGCGTTTGAAGCTAACGCTAAAGAGTCTTACAGGCTTACAAATAAAGGCTTAGAA TTAGAGATTTAAGCGGGGATAATGAAGCTCGTTAAGGAGTGGCGGAAATAGGATTTCTAATTATCATGCC CATTGACCCCTGAAGATAAGGCTCAACCATCAGCTCTTAAAGGCTTTCGCGATGGTAGCGGATGGCAATAA TGATCGTTAGCCTTAAACAGCGAGCGTTTCTTTAGGTTTGAAGAAAGCGCTTTGAGTAAAGCGCATGCGATA TTTTGCTTTTGAAGAGGATTTGAGTTTGTCTAAAAAAGCGTTTGAAGCTCAAAAGCTATCAAGTGGTGTTC AAACATTGTTTGAAGCTTATTAACGCTATTTTAAATCCGGTGGCTATGCTAGGATACATTAACCCCTTTAATAGC GAGTTGAGCATGAGCGCTAGCTACCTCTTAGTGGCTTAAATCTTTGAGGTTGAAGCGCTCTTAAACAAAC	552	IEFFAHGLKASYQNETLLVGSLLFLGS MGVDIPMKESANIMVGFKNETLCALFI LEERLKANAKEVVQALQNKGLELEILS GDNESSVKECAKKLGISNYHAHLTPED KAQTISSYKGVCAAMVGDGNNDALAK QASVSLGFEKSALSKSACDILLLEEDLP LLKKAFFDNAQKVYQVVLQNVLSLYN/C LIPVAMLGYNPLIASLSMSASSLLVVL SLRLKRS

HP0687	553	AGAGCCTAAAGACACTAAAGAAAGACACTTAGAGGGCGTGTCTAAAGGCTTTGAACCCCTAAAGAGCAAC GCCTAATCACCGAATCCAGTTTGTAGAAACCTTAGCTCTAATGCAATAGCTTTATTAGTGGGACTTTTATCGCA TTTGGTGCCTAAAGCTTACCTTCCCGACTTTGTGGTCTTGTAGGGGTATTATTAAGAAACACCTTGTCTC GTTTTTAAATCCATAGCGTGTGACAGAGAGTTTCAGTCATAGGAACTGAGTTGAGCCTGTTTTAGCCTA CGCTTGTAGCGGTGAATTTATTGAATTTTAAACTCGCTGCGGTAGCGGTATTGAGCGTTCAAGTGGT ATTTATGATCCCTTATGTGGTCTGTAACCTTAAAGGTATCGGGAAGGATTATGATGCGGCGGTGTTGCGCGG GGCATTGCGGTTTTGGGCTTGGAGCGACTCCAACGGCTATGGTGAATATGCAACCATCACCAACCTACGCGCC ATCGCATGTGGCGTTATCGTGTGCTTGTAGTGGAGCGTTTTTGTGTGATATTATTAACGCTTTAGCGATTAAAGG CTTTTTG	554	EPKDTKEKDTLEGVSKGFETPKQI ITESFVETLALIAIALLVGTFLSHLVPI FTLPTFWCLFVGVILRNTLSFFKHS FDREVSIGNVSLSLFLAYALMSVNLIS LLKLAVPLAVILSVGVFMILYVVLVTF VCGKDYDAAVLCAGHCGFGLGATPTA MVNMQITITNHYGPSHVAFIVPLVGAF FVDIINALAIKGF
HP0687	555	ATTACCGCAATCTTGAATGACTATCCCATCTCAAGGCTTTTTGCCGGTGTGTCGATGGGTTTTAAAGCGTTA GTGATTTTCTTATTTTGGATCGTGATCTTTTGGATTAGTCATCAATATTTTGGCTCCATTTTACACCCCTTTA GTGGTCTCTTATTTGCACCAAAATATATCCCATGTTGTTTGAAGAAATTTGGCTCTATCCTTTTCTATTAAATA TTTTTAAATCGCTCGCTTATGCTTTTATCTTAGCGTTTTAACGCCCTTTTATTTTCAATCCCTTATAGGGTCT TTGGGCTTTTTCTATAGTTCGCAATTTCTTTTTTCAAAACACTATGAGTTTGGATATAGCCAGCATGATTTT AATCACCAAAGCTATCAAAATTTACTCAACAGCACCGATTGAAGCATATCGTTTCTCGTTTTTGTCTATCTTTTTC CTTAATCCCTTTTTTAAATTTTTTGCACCTTATTGCAACCCCTAATGCTAACGCACCTATTTTATCTTTAAAGAGA AAGAAATGCTAGATTTTATCAAGAGCTTAGCACCCCTTGTAGGATTTTTCTGTGTTTTAAGGGTTAGCGG CGTGTGCTTTCTTCCCTTTTTTGAACCACTTATGTCCTTTGCGGTGGGCTTTGAGTTGTATGTGAG CGCGATTTTTACCCCACTTTAGAATTTTCAACCGCGCTTACACGCCAGAGGTTTTATCATGCTTGTGTGCGA ATTGTTTTAGGGGTGCGGCTGTCTTTTTACAATGCTTTTGAAGCTTAGTGTGCAACCGATAGCATCAG CTTTCTATGGGCTTACGATGGCGAGCGGTATGATCTATTTCAAGATCGCAAAACCCATTGTGGGCAAGCCC TTTTATTGTTAGCGATTTTAAATTTTATGGATTATCGTTCCACCATCAATCTTTGT	556	LQSLNDYSHSQGFFAGVFAWVKAL VYFLFWIVILLSLVNIFASIFYTPLWSY LHQKYYPHVWLEEFGSILFSIKYFLKSL AFMLLFLAVLTPFYFIPFIGVFGVFFSIV PHFLFFKNTMSLDIASMIFNHQSYQNLL KQHRCLKHYRFSFFCYLFLSLPFFNFFAT LLQTLMLTHYFFIFKEKEC
HP0687	557	TATCCCTTTAATCACCGGTTTTGGCTGCTCAGTGCCCGCTTACATGGCGACAAGAACCTTACAAACTATAACGAAC GACTGATCACGCTTTTGTGATCGGGTTTATGAGCTGCTCGGAAGGCTGCCATTTATGCTGTTGTAGGCTCG TTTTCCCTTCTCAAGTGTGCGTTTGTGCTGTTTGCATTTATATTTGGGGCGGTTGTGGCTTAGTGATGGCC AAATTACTCAATTAAGCGTGTAAAGGACAAACCGAATCTTTTATCATGGAATGCCAAATACCGCTTCCAGTT GGAGATGGTCTATTTTCACTACACCAATCGCTTTTACCTTAAAGGCTGGGACTTACATTTTAGTGGGAG CGATTTTAACTGTTTATGCTCAATACCTTAAAGCGATCGGCGCATGAAAGCTTATAAACAAGAAAGCTTGTAG TGATAAGGATACCACTCTTTCAAGCGAAGCTAAAGAGAAAGAAATTAAGAAATTAAGAAAGAAATTAAGAAAGAA ATTTAAAGAAATAGCATTTAGGAAGAGCGGGGCTATTAGAAAGCTTTAGCCCTATGGATTTTATTGGCGCTT TGAGTGTGCTCGCTTGAACCGGATTTATGGCTAAAGAGGTGGTGTCTTCTACTTTGGCGGTGTTGTTTCTTAGGG GATCAAAATGAAATCTGACGCTTTTAGAGGATTTTAAAGAAAGAAAGTACGCGTCCCTAGCGGAATCGCTTTTATC GTGTTGTGATGTTTATATCCCTTGTGAGCGGACCATTTACTTTTGGTAGGAGCGGGAGGAGGATAAGTTTGT GCGTATTATTATCTTACAAACCGTTGAGCGTATGCGTTTCTCTTGTAGCTTTTATGCGACTCAAAATTTTGGTTT AAAAAGGCTAGCCATAAAGGTTTTTAAAGCCCTTTATTGTTTAAATTCACCCCATTAGAAATATTAAAGAAATTTTAT TTTTCTTC	558	IPLITGFGCSVPAYMATRTLQNYNERLI TLFVIGFMSCSARLPIYVLVFGSFFPSS SAGFVLCIYILGAVVALVMAKLLKLSV FKGQTESFIMEMPKYRFPWSWRMVYFSI YTKSLSYLKKAGTYILVGAILWFMSQY PKSDAAMKAYKQESLLVNKDTLSSEA KEEKLKELKTELDKNLKNSIVGRGGA YLEKVSPMDFDWRLSVSLVTGFMMAK EVVSTLGVLFSLGDQNEKSDAFRGIL RKEVSPSGIAFIVFMIFYPCFAATTF GREAGGIKFVAYLFIFFTVAAYAFSLIAF YATQILV

HP0687	559	CCAAATTTGTAGCGAGCTATGGGATAAAGTGTAGCGGGCATGCAATAGGCATTAGGTTGAAACCTTTTCGTTT ATGCCCGGATTGGGTTTATGATCGCAGCGATGGTTTAAACAGGGCAAAATTTAGGGCAAAACAGCCAAAGATCGC CACAGAAATACGGCATTTGATTTTAAATCTCTATGGTTTAAATGGGGTTTAGGGATTGTTTAGTCTTATTGCTT AAAGAAATTTGGAGCCTTTTCTCAAGATGAAGAAGTCTTGAAGTGGCGCATCTTATTGATCGCTGTGGCCT CTCTCAAGCCCCCTTAATTGGGTATTTGTGCTAGATGGAGTTTGTAGAGGGCTGGCATTTCTAAAGTCTCACTGTA TATTAACACCCCTAAGCTTATGGGGTTAAGGATCATGCCATTTACTTGTCTTAAATTCATCATTTTAAAGTGGAATTT ATTTTGTAGTATCGCATCAGAAACTTTTTCGCTCATCTATTATAAAGTTTCTAAAGGCATTTGGAAAAG GTGCGGAAAGGCTTGATTATTGCTTGAGCGTAGCGGCTGTTTGAACGGCTTCTCGCACCATTTGCACGCC CACTTCGCCACATACGAGCGCTCTCTCTATCTTTTAGCGATCTTCTGGCAATAATAGGCACCTTGATGTCCT GACTTGGTTGATTGACATCACTCTTAATCTCGCCACCTCCATCGCATACGCTTTTCCACCCCATCAAAATCT AGCGGATCTCTTCAAGCTTGATGCTTACGTTAGCGTATCTTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT TGAAAGCGCATCAGCGCGCACACGCTCGCGCATCCACGCTCAAAATCTCTCTCTCTCTCTCTCTCTCTCTCTCT GCATTGATCACAAACCGGATCTCTTATGGCGCTTGACACCTCAA	560	KFVASYGDKVLGAGMQIGIRVETFSFM GFGFMAAMVLTGQNLGANKPKIATE AHLIKISMGLMGVLGIVLVLFAKEFAS FSQDEEVLEVARSYLIAVGLSQAPLIG FVLDGVFRGAGISKVSLYINTLSLWGL IMPIYLLIHHFKVEFIFVWIASETFLRSH YKVFSGKIWKRCGKKA
HP0687	561	CTTTAACCCCTAACCCGTTGTGGCGGAGCGAGCGCGGTTGATAGCGACGATGATAAAACGGCGTGGCTAG GGGTTGTATTCTAATGAAGCGGGTTAGGAGCTCAGCCATTATGCCGCGAGCGCTCAACACGCCACCCGGTG CGCCAAAGCCTTAGTGCTCCTCAAACTTTATTGTAACCTTAATAGTGTGTCCGCAACAGCGAGCGTATTTTA ATGGCTCCAGAAATACACACCTTGTCTCCCTAATGGGGAATAATTAAGCGCTAATTTGCTCACTCTAAAGCACGGA GTAATTTCTAGGCTCATTAGGACGGTGGTATTTTACAAACCATGATCTTTTGGCTACTCTACGATCATTTGGTTG GGCTTATTATGGGAAATAATGCACTGAATACGCTTTTGGTGAATAAAGTGAATAATACCGCTTGATCTTTTAGC GAGTGTGATGGTGGGCTATGGCCAAAATGATTTTGTGTGGAATTTAGCGGATCTTTCTAACGGCTTATGGCTA TCCCTAAATTAATCGCTTTGATTTTATTGCATAAAGTGGTTTATTCTGAACCTCGTTGGTATTTAGCAAGCATCTAAC AAGTAAATGGCATGTTAAAGGGCGAGTTTGTAGAAAGTGGATACCGCTCTTTAAGGCATAATTTTAGCGCAGTC AAAAGCATTTGCTCTAAAGACGCTTGTGTCATGGCGTTGTCAAGCGAACGC	562	FNPKPVGGASGALIAMIKTGVARGL YSNEAGLGSSAIIAASAQTRHPVRQAL VSMQTFTVTLVCSATASVILMAPEYNT LLPNGEKLSANLLTLKSTEYFLGSLGTV VIFTMIFAYSTIIGWAYYGEKCTEYAF GEKKVYYRILIFLASVMVGAMAKIDFV WNLADLSNGLMAIPNLIALILLHKVVYS ETRWYFSKHSNK
HP0687	563	GATGGTTTAGTCATTTGCCCGCACTCTTGTCTTTTGTGTTTAAACCTTAGAGTGGTGGTTTCTTGCAAAATTTT TTATGGGGGATTGGGATCCTTGGGATTTCTTGCAATAGGGTGTTCAGCTTGGCGCGGATGCCACGG ATGTTGCGAGTGGATTACTCAGGAGCTATAATGTGGGATTGATCAGGAGCGCTGTTGGCAGTATTGTGATC CACCAACTAGGGCTAGGATATATTGGCTTTGTGGTGGGCTTTAGGTTTGTGGCGCTCTTTTGGCTTAGATTCTAT TACGATAAAGTTTAAACACATAAAGAGCGTTAAAGGATTAGCCCAATAAAGGAGAATCCCTTTCGCACTAAAC CATTTTAAATGATACCGCTTAATAACCGCACTAACGGATAGATTGTCTCTTTTATGTTAAATAGAAAAATTTGTC ATAAATTTAGGTGGTGTGGTTTAAATGCTAATAAAGAGATTGATTGCTAATAAGATCCGATAAGAAAGCTCTTT TTTATTATTTATCCCTTTAGCTTTTCTAIGATTTCATTTCCACTTACTATGATAG	564	MVLVPCQLLLFVKLNLEWVFLQIFLW GIGITSLGISLQMRVLQLAPDATDVASAI YSGSYNVGIGSGALFGSNVHQLGLGYI GFVGGALGLLALFWLRFITIKFKKT
HP0687	565	CGCTTTTGGTGGGCGATCGGCATGGGAATGCGGCTGCAGCGACCATACAGGCACAGCGAGAAACCCAGGAGT GGCGGTAAATTGCTCACTACCATGTTTGTGCCATGGCATGATTGAAGCGCAAGTGATTATCTACTAGTGTG CTATTACGCTATTATAGTAACCCATTCTTAAGTTAAGGTTTGTGGCTAAATCATTTGCTTAAAGCGTGATTT AGCTATAATATTGTTTAAATTTTACACTGGTGGTGAATTTGGTAGACACGCCATCTTGAGGGGGTGGTGG GAGCAATCTGTCGAGTTCGAGTCTCGCCAGTGCACCATTAAGTTTATTAAGGAATAAGTGGGTATAATCTCACT CTTTGCTCTATATACGCCGAAGTGGTGAATTTGGTAGACACCGCTAGACTCAAAATCTGGTGGGAGCAATCCCGTG TCGGTTCGAGTCCGACCTTCGGCACCATTAATAGTTAATAGTAATCTTTTCAATCTGCATTTTATTTTTCAT	566	AFGGAIGMGNAAAAATTTGTARNPGVG GKLLTTMFVAMAMIEAQVIYTLVFAIAI YSNPFLS

HP0687	567	TTCAAAAGATGATGCAAGAAACCAATACCTTCTCATTGAAGACGCCCTGAAAGATTGAGCCATGCTTTAAAAACGC GCTACAAGGAGATCACTGAACCTTTATTTAAAAATCAGCAAGTTAGAGATTCTCCCAATCTCAAGTGGAGCGAGCG TGAAATCCGCTATGAAAGCAATCTTTAGCCTCTTTTCTCTTATTGTTTAAAGCAACCCCATAAACCCCTTTATT AGAGCCGTTATATTTCCCGAGTTACGGCAATTTTAAACTTAGCACCTCACTTGTCAATTAATAAGCGCGCTTAT AGACCCCTTCAATGGGGAATACCATATCATCAACGCCATGATTAGAAGACGCCAAAGCAACCAAGCGCAAGCGA TATTTCCGCCAAACGCTGAAATCAATGTGCTTCTCAACCTTTTAAAGGAATGAGCAACGCTTCTTACGGAACA GTGCTTGATTCAGCCGCTCAGTAAATGCTAAACCTTTTAAATCACATTTTCTTGGTATTTTCTTAATCCTAAACA AATTTAAGGTATTATTAATAGATAATGTAATAACCTTAGGTTTAAACCTTGACTAAATTTTAGAAAAAAGTAAT AAAAAGGCTAAAGAAATGCTT	568	QKMMQENQYLLIEDALIKDLSHALKTR KEITELYLKISKLEISPNSQVGASVKIR ESNL	QTSNAQTPVTDKKVPLLVVDVWEHAY YIDHKNARPVYLEKFYE HINWHFVSQC YEWAKKEGLGSDVYYINELVHKKA	
HP0525	569	TCAAACGAGCAAGCTCAACCCAGTTACGGATAAAAAAGTGCCGCTTTAGTGGTGGATGTGTGGGAGCATGCTT ATTACATTGACCATAAAAACGGCGCCTGTGTATTTGAAAAGTTCTATGAGCATATCAATTGGCATTTTGTCTCA ATGCTATGAATGGCGAAAAAGAGGCTTAGGATCAGTGGATTACTACATCAATGAGTTGGTGCATAAAAAAGCCT AAGCGTTATTTGCATAGAGTGTTTAAAGGTTTTAAACCCAGCTTCTTTGTTGAATGAAAGACACTCTGTTTAATGA ATCCCTAAACAAACGCTTTTGTGTTGATGAAAAAGTCCGCCATGTTTTGATGACATGCTGGAGCGATCTATCCCTA TTATCATGAATGTTGAATCTAGGGGCTATTTATCGCTCAAAATTTAAAGAAATATTATCCTAAGTCTTGCCT AAGCCCTTGATTTAGATTGGGCTGTTCTACCGGAACTTTTTATCGGCTTAAACGACAAATCCAAACAGAGATT GAGCTTGAGGATTGATAATCCATGCCATGCTCAAAAAGCGCAAGAAAAATTAAGATTTTAACAATGCCCGT TTTGAATGCATGGATTTTAGAGGTTGAGTTAAAGAGCGCGCTTTTTCATGCTTTTGTGTTGCAATTTGTCC GCCCCATGCAAGAGAGGTGTTGCTCAAAAAGATTATAACAGCCTTGCCTTGAATGGGTTTTATTGGTGGCGAA AAGATCATGAGCGAAGATCGGATATTAGACAAGCAATGATAGAGCTATACCTTTTATAACAAAAATCAAGGCTAT AGCCACAATGAAATCGCTTCAAAAAGGGAAGCGTTAGAAAATGTACTTGTGCTTATAGTTTGAAGAAAAATGTCGCA CTTTTAGAAAAGCGTGGGTTTAAAGCATGTGGAAGCGCTGTTTAAATGGTGAATTTACGCTGTTGGTCGCCAGAAA AACTTAAGTT	570		PCVGNMEVELETKENIPIYCLGLIKQALE KQMGGRNRQ	
HP0525	573	GTCCATCGCTTGAAACATGGAAGTAGAGCTAGAAACAAAGAAATATCCCTTATTGTTGGGATTGATCAAGCAG GCTTTAGAAAACAGATGGGTGGTAGGAATAGGCAATAAAAACCACTTATTCAAAATAAAGAGTATAATTACAAAT TACTTACAACCTTAAAGGGGATATGATGAAAGTTCTATTAGAAATGTGAAAAATTTAGGCAAGCGGGTGAAGTG TGTGAGGTTAAAGATGGCTATGGGAATAACTTTTAAATCGCTAACCAAAAGCCAAACTCGCTACTAACGAAATGATC AACAAATACAAAGCCGAAGTCAAAAAGAAAGCGGAAAGAGCCCTAGAAAAGGCAACAAATTTGCAATGGTAGA AACCTTACAGACTATCAGCTGACTATCCATAAAAAGTCGGCGAAGCGCTCTTTATTGGAGCGATCACGAAAG AAGAAATCACGAGCGTTTGAAGAACAGCATGCGAGTTTAAATTTAGATAAAAAGACATTGAGCTCAACACCCG ATTAAGACACAGGGATTATGAGATTGAAGTCAAGCTTGGATCGGGGTTGTGGCGTGTTTAAATTTGATGTGGT GGCTGAGTAGAAAATGTTTGAAGCGACGACGATTTAGGCTATAGAGGGGAATGAATCATAAAAAGTTCCGCGCTC TGAAGAACTTTTGGTGATTTTAAAAATGGAATATCACTGAGATTGTACAAATGGGAACAAAGGTTGTATGGGT TTAAAAATAATGGCAATGGCAACCATTTGATGTGAGACAGGAAGCCCTTAGCCTGTCTCGTTTAAATGCAATTT GCTCGGTGTGTGCAAGTTTAAAGAAAAACAAATAGACAACCTATGAAATCTCTATTGAGCAGCAATTTAGCGAAT GGTGAAGGGTGCAGATTGCTCTTCCCTGTTACAGTTAATGATGAACCATTTCCATATCCATAAGGATACCTAGC AAAAAACCTATCCTCATAGCTTCTTTGAAGAGCAAGGTTTTATAATCTACTAGACAACAAAGCAAGCGATCAGC GCGATTAAAGATGGTATTGCTATTGGTAAAAATGTGATTGTTGTGGGACAGGAAGCGGTAAACGACTTATATC AAAGCATCATGGAGTTTATCCCTAAAGAAAGAAAGGATCATATCCATTGAAGACACCGAAGAGATTGTATTCAAACAC CACAAAACCTACACACAGCTTTTTTTGGTGGGAATATCACCTCTGCTGATTGCTTAAAGTCACTGTCTGAGAAATGCGG CCTGATAGAAATCATTTAGGGAACTCAGAAAGCAGTGAGGCATACGATTTTATAATGTGCTTTGTAGCGGTCAATAA GGCACACTAACCACTCTGCATGCGAGGAGCAGTGAAGAAAGCGTTTATCCGTTTGGCCAAACATGAGTTTCTAATAG CGCAGCAAGGAATATCAAGTTTGAAGTCTTATTGAGGGCTTTAAAGATTGATTGATATGATTGTCCATATCAACCA CCACAACAGTGTGATGAATTTAT	574		EELFGDFLKMENITEICYNGNKVWVL KNNGEWQPFVDVRDRKAFSLRLMHFA RCCASFKKKTIDNYENPILSSNLANGE RVQVLSPTVNDETISIRIPSKTTPH SFFEEQGFYNLLDNKEQAISAIKDGIAI GKNVIVCGGTGSGKTYYIKSIMEFIPKE ERIIISIEDTEEIVFKHHKNYTLQFFGGN TSADCLKSLRMRPDRILGELRSSEAF DFYNVLCSGHKGTLTLHAGSSEAF RLANMSSSNSAARNIKFESLIEGFKDL DMIVHINHKKQCEFY	15428

HP0525	575	AGAAGCTATCAATTACTCGCCTCAGATGAGATTAGAAACCGCCCTTATTGACAATCTAACCCCTATTCCCTGA TGAACAGATCAAAATTAGAAATACGAACCCACTAAAGTTACCGGAGAAATGCTAGATTATTACGCCCTGTGGGAAAG GCCAAAGGGCTTTGATCGTCGCCACCAAGGACTGGGAAACGGAGCTGATGAAGAACTCGCCCAAGGCATCA CTTCTAACCCCTGAAGTGAGCTGATTATCTCTAGTGATGAGCGCCCTGAAGAACTACGGATATGCAACGA AGCGTTAAGGGTCAAGTTTTAGCTCCACTTTTGATTTGCCGCAACCAACCAATGCTGAATTAGTCTTA GAAAGGCCCAAGGGCGGTGAAATGGCAAGATGTGGTGTATTGATTCTATCACCCGTTTAGCCAGAG CGTATAACCGCTGTAAACGCTTCAAGCGGTAAAGTTTAAAGTGGAGCGGTGATGCAACCGCTTGCATAGGCCAA GCGTTTTTTGGAGCCGCAAGGAATATTGAAGAGCGGGAGCTTGACGATTATCGCTACGGCTTATTGAAACG GGATCTAGAAATGGATGAGGTGATTTTGAAGAAATTAAGGACCGGGAATAGCAATCGTTTAGCGAGGAATAT TGCGGACAGCGCATTTACCGGCTTTGATATTTAAATCCGGCACACGAAAGACAATATCTTGTGCGCAAG ACCGCTTGACTAAAGTGTGGTTTTAAGGAATGTGATGCAACAAATGGACGACATAGAACCTTAAGCTTTGTGATT CTAAATGCAACAACTAAGGACAA	576	EAINYSPSDEIRNRLFDNLTPLPDEIK IKLEYEPTKVTGRMLDLFSPVKGQR/ LIVAPPRTGKTELMKELAQGITSNHPE ELIILLVDERPEEVTDQRSVKQVFS STFDLPANNHIRIAELVLERAKRRVEM GKDWVLLDSITRLARAYNAVTPSSGK VLSGGVDANALHRPKRFFGAARNIEEG GSLTIATALIIETGSRMDEVIFEEFKGTG NSEIVLARNIADRIIYPAFDILKSGTRKD NILLGKDRLTQVWVLRNVMMQMDIEA LSFVYSKMQQTKD
HP0525	577	AATACGCTGATCCTAGCACTTCTAAAAGAGAGCCGATAAGGGATTAAAAAGGTGTTCAAGACAGCAAAAAGAC GCTTGGGGTTTCATCTATGAGATCAGCGAGTTTCATGAAGCCCTATACCGCATTTGCTAAAAAACAAGACCGATACGT CTATTTATTGAGGTATCTCCCTCTAGGTATTGGCCAGCATTTAACGACTGCCCTTATGTCAAAATACCCCTGATTTT GACGCTTTGAAAAGCTTTTGTGCTTATTATTACCAACTTGATTGAGGAGGACGATCACCGCATCAAGCA AACAGTATCAACATTAACAAAACGTTAAAGCAATAAGAGCGTTGAACCATCAAGAGCTTATATGAATAGCAT CGACTCTTATAACACCTTTGATCAATACCTCTATAACTTATGGGATAGCTCTTCTGTTATCATAGCAATGGGTGCGT CCTGCTTAGCCCTAGCTAATTTATTCATGCGAGATGAAGAGAAACCCCTTTATCGCTATGGATGCCGAAACCCAA GTGGAGCATATTTGCCACAAACGCCCAAGAGGCGAGTCAATGGAACGCGGATTTGACAAAGAAAAGAGAGA ATGGTAAATAATATCGCAATTTAACCTTTTAAAGCGTAAAGAACGCGCATGCTTAAACGGGATTTTGATGA AAAAAGAAAATTTATGAGGCAAGACACGAGCAAGTATTAGCTGTTATGACATCACTAAAGAAATTTATAGCAA TTATAGGAAGTGAATGAGAAATCCCTCCAAAGCGGATACAAATCTTTGTATACACTATCACGCTGTTTACACAT AGAGGGCAAGAGATGATTTGAAGATGATTTTGATCT	578	YADPSTSKKRADKGLKVKFKDSKDA CGFIYEISEFMKAYTALLKKQDRYVYLL RYLPSTWYASILTALYVKYPDFDALK KLLVSYYYQTWAGGTTRIKQTSINIKN VKSNSVETIKELINSIDSYNTFDQYLY NLWDSSSVYHSKWVRPVLALANYFMA DEEKPHFIAMDAETQVEHILPQTPKRG SQWNADFKEKREEWVNNIANLTLK RKKNHALNGDFDEKRYGGKDTSK VISCYDITKELYSNYRKWNEKSLQERY KSLYNTITPVLHIEGQEDDFEDFD
HP0525	579	CAGACATCAAAATTCACACACCCCAATCAGTTAGAACATCCCTCAACGCTCTTAAAAACAAGCTAGCGCATCTTTT CAAAACACCCCTGATAAACAATAACGGCATGGAGTTTAAATGAATAGCTAAACTCAATAGAACGCTTTATATGCCGC AATCTAGCGATGGTTTGATGATTTTCGCAAGCATCTTGAAGAGAGATTTAAAGTTTATCAGAGCGGAAAAAATC GTTATGGTTTCCCTAAATCTTTGATGTTGCAGACATAGAACAGAGAGAAAGTCAATTGAATGGCGAGAAAAAG AGAGAGCGTCAAAACAAGCTATAACAAACCTTCAATCAACAAATCGCTAACGATTTAAAGCGGTAGTAAGGTAG TGGATAAAGAACGATTTAAGCGGTAGACGCTGATTAGATCGTGTGTTTATCCCGCTAAAGACTTGTAAAGC AATTAGAAAAATCAGCGCTTCTCTTCTTAAAGACATCGTAATAGCGATAAGCAAGTAGAAAAATTAGAGCTTAGCT ATGCGCTAATAGACAATATCCAACACACACGCTTGATGACACGCTTGATTTTACCTTTATTGTTGGGATCTTTGA GCGTTAGTCGCTTTATGTTACCTTTGATCTGGTATTGACATGGATAGGCTATGAGCGGAGCTTCTCAACCAT ATTGGGAATTGGGAGTTTGAATCTAGAGAGCGGCGTTAGAGTGGGTGGATTATCGCAAGCTAAACTGATCAT TGAACGCCCAAGAGCGCTAAAAAATCGCAATTTATCGCAATTTGAAGAAATTTGACTGGCTGTTTATTTAATGG CGCTTACCGCTTCAAAACGATCTTAAGGGCAATAGACATGGAATTTTAAATAAATTCACACCCCAACAAAGGAGAA ACAAGCCATGCCAAAAGATAAAGAACATTAACCAACATTGAACGACCGGATTATAGCGGAA	580	DIKFSTPNQLEQSLNALKNKLAFFSKH PDKHNGMEFNEIAKTQIEALYMPQSSD GFDDFRKHLEESIKSFIRAKKNRYGFP KIFDVADIEQEERKVIEWREKERASKQ SYKQNLQINKIANDLKRDKVVDKRTILS VIDADLRGFIPPKDLLKQLEKISASLSK DIVIAKQVEKLELSYALIDNIQHNTLDDT LDFTFVGDLSVQSLYVTFDLVIDMDR PMSEQFLNHIGELGSFESRERALEWV RLSQAKLIETPREALKNAQLSQIEEILT GCIFNGAYRLQNDLKGNRHGNFK

HP0525	581	CACCGCAAGAAGAAATCATTACCCCTAAACCCCTCTAAAAAACCCTAAAGAAATCTCATAGTGGGACAAACTC CATGAGATTAAACAAGAAATGAAAGACTTATTCTCTCATTTGCCCTATAAATCAACAAAGTGGAGTGAGTCTTTATG AGCCGGGGTGTATTGATTGATGATGGGAAGATTCCGCTCTTTAATTGGCGAAGAGCTATCGTTACAAA GCCCTTCTTACTTGCTTTTAACTGGATCCCACTCCAAAGCGTGATGACCGTGATGAAATCTCCACTTTTAC AAACCAAGAAAGGTTATGGATACCACTCCAAAGCGTGATGACCGTGATGAAATCTCCACTTTTAC GAAAGCCCTGATGGCGTTTAACTTATCGCTTAAAGAAATTAAGAAAGCGTTCCCTAATAAATATGCTCCAT CAAAACCAACTTAAACGATGAAATAACATCGTCAACGACTTAAACAAATGAATGACACCATGCGGCTATCGCTA CCCCTTAGGCAAGGAGCGATTAGCATCAATAAATCAGCGGCATAACGCTCTAAATATCCTCAAAACACTCACC CAAAACAAAGACTTACCCCGGAGATAGCTTATGTCACGATATTTTCTAATGGTGTTTATGGACAAAGCGTTA GTCATTTATTTCAAAGCCCTTATAGTTTCACTGGCGAAGATGTGTGCGAAATCCAATGCCATGGAAAGCCCTTTTA G	582	PQEEITPKPSKKNPKEESHSGDKLHE KQELKDLFSLPYKINKVEVSLYEPGV LIDIDGEDSALLIGEKGYRYKALSLLF WIHPTYGYSIRLEISTFLQNEKVMMDT QLQSVIMTVHEVGKGQIMKAPDGVLT ALKKLRKAFPNKYVSIKTNLNDEKYIVIN DFNNE
HP0887	583	AAATCATTACTCAAGCTAGAAAGGCTAATGGGGTGATTGTTCTAGCCTTACAAGACATTAAACCACTAAGCGAAGTGA GAAACGCTCAAGCTTTATAAAAAATATGGGCAATTGATTTGTATCCCAAGAAATATTGATACCAAGATTTTAA CGATAAATTTGGCATTAGACTAAGCGATACAGAAAAACATTTTGTAGAAAAACACCGCGTTAATGAATACAAAGTCTTA CTCAAAACATGATGATGCTCATCTAACATTATAGATGTGAGCCTAAGTTCTTTGGGTAAATACCTACAAATCTTTA GCTCTAATTTAGCATGGTAGAACACATTTGATGACAAAAACACTTAAAGAGCTTACCTAAACTGGCGAAGTCTTTGTGA GTACAAACACGAAAAATTTGATGACAAAAACACTTAAAGAGGCTTAAATGAAAAACATCATGCGTTAGTTTTT GTGATAGTGGCTATGTTCTATGTGCTGCTCAGAGAAATCATAGAAATGAAAAATCCCTTGTGCGTTAAAGGAC TTAAACAACCTCTTTTAAAGGGGACACATGCTAATTTGCAAGAACTTAGAGAGCATTTAAAGAAATTAGAAAAATTC TTTGAATAGGCTCTTTTACTAAAGAAATATTAAAGAAATACGCTAAATGCTTTTTATGAGTTTAAAGCATGTTTTAGA AGAACAAAGAAAAAACCAACAAAGAGTTTTTGAACAAAGATACCAAGAAATCAAGAAAGAGCTCATTTAAAAACAT TCAAAACAAAGCATTTGCTAAAAACCAAGAGTTAGAAAAATCTCTTTTGAAGAAATGGGAGATAAAATTCAGAAAGGGT TTTGCCTAAGTTAAACGCTATTGTTACGCA	584	IITQARKANGVIVLALQDINQLSEVRNA QSFKNMGQLILYPQRNIDTKDNDKFG IRLSDTEKHFLFLENTAVNE:YKVLLKNMN DGSSNIIDVSLSLGNLYLQIFSSNSSMV EHIDNLKHYPKTWREVF:VSNKHENFD DKKHLEKVLK
HP0887	585	AAACGGTGGCGGATGTTTTGGTGAAAAACGGGCTTTTAAACGGCGTAGATCCTACGGAAGAAAAAATTGATCAA ATGCTTTTAGAGCAAAATCCAAAGCCCATCTTCAGGGTTTGAAGAAATTCATCGTGAAACTTTAGGGATTGAAATGTA GAGAAATTCATCAATAACTGGTATGGCAAGCAAGCTTGAGTCTTTTGCCAAATAATTTGTGCTGAGGCTTGAAT CAAGCCCTTGATAAAATAGGCTCTAGCTGATGCCAAAGACTTACAGAACTTCTTGATAAACGACTTTTGGGGAT ATTTAAATCAATGATTGAACAAGCCCTTTAATCAATAAATCAATTTCTTGCTGGTCCGACGATTGAGCGTT TTAGTGAATATCGCTTTAATAGCATCACTAACC	586	TVGDVFGENGLLNALDPTERRKIDQML LEQIAHSSGFEKFIKVTLGIENVENFIN NWYKGQSLSSFANNFVFGGLNQALDK IGSSSDAKDLQNFELDKTTFGDILNQME QAPLNKLISWLGPODLSVLVNIALNSIT N
HP0887	587	TCCAAGCGCACCATCTTAAAAACCTTTTGAAGCCCTTTTATCACCATAAAGAGAGTTGGGCTTTTTCCTT TTTTAGTTTGGGATCTCAACCCCTAGCGTCTCTTATGAAAGCGGCTTAGCTCTTTAGAAACTATTATGGCTTTG TTCCAATCCCATTTTAAAGACGATACCGCACTCCACAGAAATTTAAAGGATTGTGCAAGCCTTTGTTCTATGGCTA AAGACAAACGATCCCAATCGCTCTTAAACGCCAAGCTAAAGACAAACGCCAAGCTAATTTAACGCTTTGTAGAAA GCCTTAGCGTGAAATTTCTTCAATCTTACAAAATAAGCCATGAGTGATTTGGAAGTCCCCCAGCTAAAGGGTTT AAACGCCCTTTTAAAGCCCTTTTATCTAAAGACGGGCTTAAATGCGCATGGATTGAAGAGAGCGCATTCAGGCAA ATTGTCATCTTGGCTCTTTTGTATCGTTCTAGCGAGCTATTAGCCAAAGATTTTGAATGGGGCTATTGATT TGCTTGTTTTATCGGTGGTGGTTGAACCTCATCAATAGCTCTATTGAAAGGGCTGAGTTTACTGGCACCGAGT TCCACCCATTAGCCAAAAAGCTAAAGACATGGCCAGTGCAGCCCACTGATAGGGCTATTATTTTGGACTTTGATT GGGGCGGTTATCTTTAGCGCTTTTATTTGAAGTAATTAATTTAGGGAGACACATGCAAGATAATTCAGTCAATGAA ACAAAAAATATTGTAAGAGTGGGATTGATCTTCTATTGAAGAGAGCTATTAGCTTATTCATGAGCGTGATCATA GGCGCGCTTACCGGACGCTAGAGATGGCTTAAAGCCCGTGCATAGCGGTATTTGTATGCGATGCGATGAATTAG GCCTTACTTCAAAGTGGCTTACAAAAAAGCGCTAGGATCGTGGTGATGATG	588	QAHHLKNLLEAFYHQNKIESLGFSPYF SLRSQTPSVSYESALASLENYFMALFQ SHFKDDTALQQNFKGLLQAFVSMKD KRSQIALNAQAKDNAKLTFNALLESLSV NFFQSYKISHE

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HP0887	589	GTGTGGGTTCTGGAGCCGGGAGGAAAGCCAGCTCTACGGTTTAACTTTGCAAGCTTCAGAAGGGATTACTAGCAG TAAATGCGGAATTTCTTTATGATGGCCACGCTCAATTTGGCTTCAACACAGCGTTAAATTAATGGGTAATGT GTGATGGCCGTTTGAATATGTGGAGCGTATTTGCCCCCTTATACAGCAGCATAAACACTTCAAAAGTGACAG GGGAAGTGAATTTAAACCATCTCACTGTGGCGATCAACACCGCGCTCAAGCAGGCTTATCGTAGTAACAAGACT CATATTGGCAGACTGATTTGTGCAAGCGCGGACTAAACATTTATCGCCCTCCAGAGCGGTTATAAGGATAA ACCTAAGGATAAACCTAGTAACACACCGCAAAATAATGCTAACCAACCAACAGCGCTCAAAACAATAGTAA CACTCAGGTTATTAAACCCACCAATAGCGCGCAAAACAGAAATTAACCCACGCAAGTCAATGATGGCCTTTTG CTGGTGCAAGACACGTTGTCAATATTGATCGCATCAACACTAACCGCTGATGGCAGGATTAAGTGGAGGGTAT AAAGCTTCTCTTACCAACCAATGCGGCTCATTTGCATATCGGCAAGCGGTATCAATCTGTCCAATCAAGCGAGCGG GCGACCCCTTTAGTGGAATCTAACCGGAATATCACCGTTGATGGCCCTTAAGAGTGAATAATCAAGTGGTG GTTATGCTTTGGCAGGATCAAGCGCAATTTGAGTTAAGGCTGTACGGATACCAAAACGCGCACAGCCACTTT AATAACGATATTAGTTGGGAAGATTGTGAATTTAAAGTGGATGCTCATACAGCTAATTTAAAGGTATTGATCTG GTAATGGTGGTTTCAACACCTTAGATTAGTGGCGTTACAGGTAAGTC	590	VGSGAGRKASSTVLTLOASEGITSKIG AEISLYDGA TLNLSNSVKLMGNVWM GRLQYVAYLAPSYSTINTSKVTGEVIG FNH LTVGDHNAQAAGIASNKTHIGTLIG LWQSAGLNIAPPEGGYKDKPKDKPSIG TTQNNANNQNSAQNNNSNTQVINPI NSAQKTEIQPTQVIDGPFAGGKDTVVN IDRINTNADGTIKVGGYKASLTNNAAHL HIGKGINLSNQASGRLLVENLTGNIT VDGPLRVNNQVGGYALAGSSANFEFK AGDTKNGTATFNNDISLGRFVNLIKVD AHTANFKGIDTNGNGGFNTLDFSGVTGK V
HP0887	591	TCAGTAATTTATGTGTAATGGTAGCGGTAGTAGGCACTACTTGTCCGGTGGCTTATCAACCTTTTAGGG GCAATCCCCACCAATGGAGTGAGCGATACGAATAATTAATCTGCTCACTGAATTCATTAACACCGCGGTTT ATCCAAATAATGATAGTAGTATCTACTAGTCTTACAAGCGCTTTCAAGCCATTACGAGCGCTATTTCTCAAGGG TTTCAAGCCTTACAAAACGATATTAGCCCTAATGCGATTTTAACTTGTCTCAAGAGATTACTTCTAACACCCACCA TTCAGTCATTCTCGCAACCTTACGGCAGCTTTTAGGGATAAACA	592	SNLCGNGSSSGSTTCGWLINLLGAI PTNGVSDTNLNLLETFIKTAGFIQNN DSSVSTSLTSAFQAITSAISQGFQALQN DISPNAILTLLEITSNTTTIQSFSTLR QLLGDKT
HP0887	593	GCTCTTTGCAGATATCCAGAGCTTTAGAAAACACCCAGAAATCGCTGATAAATGCGTTTAGAGATTGATTTAAA AGACGATAAAAAGAACCCCAACCCCAAGCTTCAATTCATAAGCTTACGCTCAAAATGAGGGCTGAAT TTGAAGATGACGCTTCTTATTTGCCCTAAGGCTAGAGAGGCTTGAAGAGCGCTTAGTTTAGTACCAAAAGAAA AGCATGATCAATATAAGAGCGCCTAGAAAAGAAATTGAAGTCATTACGAAACATGAATCCAGGGTATATGCTGA TTGTGTGGGATTTATCCGTTATGCTAAGGAAATGGGCATTCTGTAGGGCTGGTAGGGGAGTGGCGCGGGAG CTTGGTGGCTTTTGTAAATAACCGGATATTGACCTTTGAATACGATTGCTCT	594	LFADIPALENTQEIADKCVLEIDLKDDK KNPPTPPSFKFTKAYAQNEGLNFEDDA SYFAYKAREGLKERLVLPKEKHQYK ERLEKEIEVITNMKFGYMLIVWDFIRY AKEMGIPVGPGRGSAAGSLVAFALKIT DIDPLKYDLL
HP0887	595	GCAATACGACTTTAAGCGGATGTTTACTCCCTTGATCATGCAAGCGCAGTTGAGCTTAAGAAACATTGATAATTTGT GGAAAAGGCTCTGCTTTGATAGATAAATTTGACGCTAACCCCTATAAACGATTTTGGAGAAAGGAAATAATCATG AGAGCTACGGCGATAAAATCTTTTCACTCTCATCAGCATAGCCCTATTGCTTCTATGCTTGGATCAATTTA AAACAAATGCTACCGAGATCAGAACTTACGATTTGAATGCGAGTTCTTTTGAATACCGC	596	QYDFKAMFTPLIMQAQLSLRNIDNFVE KGSALIDKFDANPYKTIFGERK
HP0088	597	ATCAGTGAGGTTGCAATGCGTTAAAGAGCGGATGTGATCGCTTTTGGCAATACAAAGGCGCAGAAATCGTTT AGACGGCACTGAATACATGCTGTAGAACTAGAAACATTTAGGCTAGGCTCAGGCTCTTGTGTGCATACAG GTAATCATGACCATAAACATGCTAAAGAGCATGAAGCTTGTCTCATGATCACAACAAACACTAAACACTATTATTA AGGATACAAATGCAAAAGAAATCAAAATTTTTCAGATAGCGGAGAAACCTTTTATTGAAAGCGGTGAGACAACTCCA TGACGCTGTTAAGTAAACCATGGGCGCAAGAGCGGAACTGTTGATCCAAAAGCTATGGCGCTCCAAGCATC ACTAAAGATGGCGTGAGCTAAGAGATTGAATTAAGTTGCCCGGTAGCTAACATGGCGGCTCAACTCGTTAA AGAAAGTAGGAGCAAAACCGCTGATGCTGCCGCGATGGCACGACCAAGCG	598	ISEGCKCVKEGDVIAFGKYKGAEIVLDG TEYMLELEDILGIVGSGSCCCHTGNHD HKHAKEMEACCHDHKKH

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HP0088	599	AGGAGCTTTGATGACGATGAAATAGCGTGAGCGATTCTAAAAAGATGAAGACAACGAAGATGAAGAAAA CGAAGAGGAAAAAGTCGTTCTGAAAAAGACAAGAGCGGTGAGAAAGGTTCAAGAAAGCTTTAAAGCCCTAG ACAAGGCTAAAAAGATGGCTTAAGCCCTTGAAGCCCTCATAGATGAAGAGAGAGCAATGGTGGCTTCAATG ACCCTAGCTTACAAACGCAACACTCAAGACAGACTCTATGATTTAGAACCTACCAAGCAACTGATTAATGAATTA GTCAAAACGATGGAACCCACTTTAAAGCGCGGATGGTTTGAAGAGAGTTGAACGCTTGAATACAAACTGCC CTTATTCAATGACACTCTCATCGCAACCATAAATAATCCTTGCCAAATATCACTAACATGACTAAAGAGATATTATC GCTCAAGTGCCAGAGCGACTATGGTAGCGTGATATGGATCTTAAAAAGCTTTTTTGTACTAAAGAGCGGAGCGA AGAAGGCTTTGATCTAGCCCCCAACAGCTAAAGAAATTTAGAGCAATCAAAAGAGGGAAGTTGATTTCCGATC GCGCTAAAAACAATGGCTAAATCCAATTAAGTTGGTGAGCATCGCTAACGATTCACGAGCAGAGGCTTA CCATCTTGATTTGATTCAAGAGGCAATATTGGCTGATGAAGCGGTGGATAAGTTGAGCATGAAGAGGCTT CAAGTTTCTACCTATCGACCTGGTGATCAACAAGCTATCAGCAGAGCCATAGCCGATCAGCCCGCACATATCC GCATCCCATTCACATGATTGATACGATTAATCGCATCAATAAGTCAATGCGCAACACATTCAGAAACGCGCAAG AGCCTGATTTAGAGTGGTGCTGAAGAGTGGGCTTTCGTTAGATAAAGTGAAGATGTGATTAAAGGTGACTAAA GAGCCTATCAGTTTGGAAA	600	RSFDDDDNSVSDSKKDEDNEEDEE EERKKVSEKDKRVEKQVESFKALD KAKKEWLKALEAPIDEREDELVRSLTL AYKRQTLKORLYDLEPTSKLINELVKTI ETTLKSGDGFELKRLKLEKPLFNDT LIANHHKILANITNMTKEDIQAQVPEATM VSVMYMDLKKLFLTKAESEEGFDLAPNK LKLEIQIKRGLKLSRAKNKMAKSNLR LVSIKRFTRSGLFFLDLIQEIGNGLM KAVDKFEHEKGKFKSTYATWWIKQAIS RAIADQARTIRIPIHIMIDTINRINKVMRK HIQENGKEPDLEVAEEVGLSLDKVKN VIKVTKEPISLETIPVGNDDODGKFGDFV EDKNIVSSIDHIMREDLKAQIESVLDQL NEREKAVIRMRFGLLDDDESRTLEEIG KELNTRERVRQIESSAKKLRSPQYG RILRNYLRI
HP0088	601	GCTCAATGATTTAAAAAGCGTTGAAGAAATCACTAACTACCAAAAGCCGGTGCTTTTGTAAAGCTGTGAGGCC TGGAGGCGATGAAAAAGGATTAATCTGGTGATATTCTTAAAGAAAGTCCGCAAGAAATGGAAGCTGAAAAAC TTAAAGCGACCGCTAATAATCCCAAGCGGAGAAATGGCTTTCAGGGAATGACTATGGTTCAAAAGATTAAAGCG GTGGATAAGTCATTGATAATATCCGCCGATGCTTATGATGATGGAGGATTTAGAGATTTTAGACATTAA GAAAGCGATGATTACATGATGTATATCCGCTACATGGGGCATGTGATGGTGATGAGCGGACTACCGGGA CTTTATTTGCCATTGAAACGCTTTCAGGAAATTTGATCGCAGTATCAGGGTGTTACCGATTGTA	602	LNDLKSVEEITNYTKAGAFCKSCVRPG GHEKRDYLLVDILKEVREEMAEKKA TANKSQSGELAFREMTMWQIKKAVDK VIDENIRPMLMMDGGDLILDIKESDDY IDVYIRYMGACDGCMSATTGTLFAIEN ALQELLDRSIRVLP
HP0088	603	GCCCATTTGATTTAGTGTTAAATACAGAAAAAGTTGTGCAAGGGGATTTGAACAACTTTAAGTCTGTTATAG ATGAGATAGCCACCAAGCAATTTCAATTCATTCGATGGATGGAAGCGGATATAGATCATTTGCACCTAATGTTCAAT ATATTCCTAGATGCTATTAGTTCCATTATTTCTAGAAATCAACAGATCACTACTATAGAGTTTGGCGTGATAAGAG ATTTATCCCTTATTGCAAAACACTTTTGGAAAGAAAAACTTTTGGACTGATGGTTTTTGTGCTCTATCGGT GAGGCTAACCTGAACGATCAAGCGGTATATAGAAAAATCAAGTTAATTTACTCATAGGGTTTTTATAGTTCTCTAG CGGAACCTAAAGCATTCATCCCAACACTAAAGATATTTGGGATTTCTGCTGGTGTTTAAATCCATCTTTCT AACAACTTTAAGCTCTTGAATTTTCTAAATTTGGCTTAGCGGATTCCAAAGCTCTCTATCTTTCTTTGGTAAG ATTTTCTTAACTGGCTTCTAAAGATCATAATTACGCATAACTCCATCATCTTCAAAACCCCTCTTGTGTGCGCGCT AAAGCATGGATAATAGATAGTTGGCGGCAATTTCTGTTTGGCTGCTTTTAAATGGCTTAGCTTTTACACGC ATAGAAGAAATTAAGAAAGCTCTCATTTTTTCTATTTCTATTTTAAATAATCCAAATTCACGTAGAGCGAACTATAGTGC GTCTAAGGGCTTCTCTAA	604	AHLVCKYRKLLCGDLNFIKSVIDEI ATQSNFIAMESDIDHLHLMVQYIPRMS ISSIIRIKQITTYRVWRDKRFIPLQKHF WKEKTFWTDGFFVCSIGEANPETIKAYI ENQG
HP0088	605	AAAGAAATTAACCGATTCAATCAAAAGCGGTGCCAATAGCGATTCTCATATCAAGACATGTTTGGGGATCGTAAGACT TTAGAAAGAGACATTAACCGCTATGATGATCTTTTGTATTACCCCTTGAAGGATATAGAGGCGCATGACTAGCGCC ATTGTCAGCATGAGCGCAATGAACGAGCTTGTAAAGTCTCAGCGGCTTAAACAGCTCAAGAGCGGTACAATTT AATCCGCACCTTCTAATGATAAAAAATCCCTTCACTAAAAAGAAAAATTTGATTTGAAAAAGATCCATAAATCTCTTCAA TGCTTTCATCAAAAGCCCAACCTCCATGCGTTAAGAAATATCAATGAGCCTTAAACCCCAACCGATTTAATGATTTT AGAAGACCTCATCGCTCTTTAGACITTAATAATAGAGTTTAAAGAACGCAAG	606	KELNRFNQSGANSJSHIKDMFADRKTL EEDIKNAYDDLFDYPIDIEGMTSAIVS MSAMNELVKVSRAINTLKERYNLRTS NDKKILSLKEKIDIEIKHISSMLHQKAK HLHALKNINEPKNPNDLMILEDIALLD KIEFKERK

HP0088	607	ATGTTTGGCGACCATGCAAGGGGAGTGGGGAATCGTGTGGAGCGGACATTCACAGGGCTTTGCCG GCGTTTGTGATTTCAGGGTAGCTAATAGCTCTATCCAAAGAGCCAAACAGCGGTTCAATCGGCTTTACAAATAAAC GATTCACATTTCCCGCTTTAAATCACCATCAACCTTCCCGCTCAGATTGCCATAATCCGGAGTCATTTTGATT TGCCATCGCTCTTTAATCGCTTTCGCAAAACAGAGTTGGCTTTAAAGAGTGTGCTTTGGGAGTTAGGGC TTGATGGCAAGATCAACCCCAATCCTAACATTTCCCGATGCTTTAGACATTTGCCATTAAACACCCCATGCTAAGA TCATTGCGCTAAGGCCAATGAAGAGCTTTTTCGCTTATCCCTAATTTGCAATGCTTTTGTGGGCGCATTTAAAGA AGCGTTAGAAATCTTGCAAAACCTTGAAACCAAGCAGACACCCACAGCAACCTTAAACCGATAGAATT GAACGATAAGAGTATTATTTT	608	MFCATMQRGVAEIVAVEATFTTRALPA VISGLANSSIQEAKQVRQSAALQNNDF FPPLKITINLSPDLPKSGSHFDLPALIALI ALQKQELAFKEWFAFGELGDLGKIKPI PNIFPMLLDIAIKHPHAKIAPKANEELF LIPNLQCFVGHFKEALEILQNPETKAU THTKKLFPKTIELNDKEYF
HP0088	609	TATCCAAAGCCCTAAAGTTACCATATGACTTAAAGCCTGAAATGAGCGCTAAAGAGTAACCTTGCGGTGTAGA GCAATGAAACTAGGCACGGATTGATCATTGTGAATTTGCTAATGCGGATATGGTAGGCGATACGGGGAATTTTG AAGCGAGCGTCAAGCGGTGGAAGCAGTGGATGCATGTTAGGGAAATCCTTTCACTGGCTAAAAATTTGGATTAC GCCATGCTTTTAAACCGGATC	610	IQSPKVTTYDLKPEMSAKEVTLAVLEQ MKLGTDLINVFANGDMVGHGTGNFEAS VKAVEAVDACLGEILSLAKKLDYAMLLT SD
HP0088	611	TATCCATTAGGGGTATATTTCAACCAACAGAGTAAGCATAATCTAAAGCCCATTTGATTTAGTGTGTAATACA GAAAAAGTTGTGCAAGGGGATTGACAACTTTATTAAGCTGTATTAGATGAGATAGCCACCCAAAGCAATTTCA TTATCATTGCGATGGAAGCGGATATAGATCATTGCACCTAATGGTTCAATATCTTAGAATGTCTATTAGTTCCAT TATTTCTAGAAATCAACAGATCATTATAGAGTTGGCGTGAAGAGATTATCCCTTATTGCAAAACACATTT TGGAAGAAACCTTTTGACGTGATGTTTTTGTGCTCTATCGGTGAGGCTAACCCCTGAAACGATCAAGCG TATATAGAAATCAAGGTTAATTTACTCATAGGTTTTTATAGTTCTAGCGGAATCAAGCAATCATCCAAACACT AAAGATATTTGGGATTTCTGTTGGTGGTTAAATGATTGAACCTTAATGAGCAATCTTTTATCTATCTGCTAT CACTAAATCTAGGCTTTGCTATGCTTTAAATATCATCTAAAGAAAGATAAGTCCATAGGGCGGACTATCTAGCTTAGT ATCTAATATAGCCCTATCTAGCATACAAACCCCTTAAAGACTTAAACAACTTGTAAATTTTATCTAATTCGCACATTT CAAGCTAACTTCTTTCCCTTACTAACAGGCAATTTAAACGCCAAATTTTATTCAAGCTAACGCTAATTTAAGAGCT AGACTTTTGAATTTAAATCTAGCGATTTTCAATCTTGTGTA	612	YPLRGYISTNRSKHNLKAHLILVCKYRK KLLQGDNLNFIKSVIDEIATQSNFIJAME SDIDHLHLMVQYIPRMSISSIIRIKQIT YRVWRDKRFIPLLOKHFWEKFTWTD GFFVCSIGEANPETIKAYIENQG
HP0088	613	GTTTGTGCTGTGCGGATGGGCTAAATGCAATCTTGCGGAGAGTTAGAAAGAAATGAACCATATCT TATCCATTGAGATTGGAAGATCGGAAATAGACAAATGTATGTGCGAGTTTGCCTAAACAGGAGCGGG AAATCATGAGAAAGCTTTGAAATCCATCGCCAAAGAGCGCTATCACTCAAGATTAAAGCAAGCTAGAGATGTG AATGTGGTTAAAGAAATAATGAGCATCGCTCAATGGAGGAGTAAATCTAAAAATGCTTTTAGCGTTTTTAGCCA AATAAAGAGTCCAAATT	614	FVLCOGAKCNLGESELELLKEMNHLSI EIGKIAKLDNVMYVPLPKTRSGKIMR RLLKSIKKEPITQDLSTLEDVNVVKEIM SIAQMEE
HP0088	615	GGGGTATATTTCAACCAACAGAGTAAGCATAATCTAAAGCCCATTTGATTTAGTGTAAATACAGAAAAAGTT GTTGCAAGGGGATTGAACAACTTTATTAAGTCTGTTATAGATGATAGCCACCCAAAGCAATTTCAATCATTCG GATGGAAGCGGATATAGATCATTGCACTTAATGGTTCAATATATCTAGAAATGTCTATTAGTTCCATTATCTAGA ATCAACAGATCACTACTATAGAGTTGGCGTGATAAGAGATTATCCCTTATTGCAAAACACATTTTGAAAGAAA AACTTTTGGACTGATGGTTTTTGTGCTCTATCGGTGAGGCTAACCCCTGAAACGATCAAGCGGTATATAGAAA ATCAAGGTTAATTTTACTCATAGGTTTTTATAGTTCTAGCGGAATCAAGCAATTCATCCCAACACATAAGATAATT GGGATTTCTGCTGGGTGTTTAACTCATATCTTAAGGGGATAGGAGTATTTAAATATTCTCCCTTAAACCT CCCTAAATCCGCTAACCCCAAGAGCGCTTTTAAAGCCATTGATCAAGCTTATCAAACTAACTTTGAT CTTAAGCTGCTTGAGAAATATCGCAGCCCTTTAGCGCCCAATTTACAGCTTTTAAAGTTTCTATGGCTTGCIT TCATTCTTGTACGCTTCGCCATTGTATTGCATAGCCCTAAATGAACACCCCTCGCCATTTCCTCAATTCGCAT GCTTTAGAATAACGAGCGAGAGCTCTTTAAATCTCTGTTGCACCTTCGCCATGATACATATTCCTCGCTTA AAGCACCTTGGCTGTCTTTTAAAGTCGCAAGCTTTATCATACGAGCGGCTTTTCAATCTTTAGGCGTACCT CTGCTGATCATACAAGCTCCCTAATATCGTGCAACCATCGCCATCGTTTAAATCGCAGCTTTAGTGAATATTCC ACCG	616	GYISTNRSKHNLKAHLILVCKYRKLLQ GDLNFIKSVIDEIATQSNFIJAMESDID HLHLMVQYIPRMSISSIIRIKQITTYRV WRDKRFIPLLOKHFWEKFTWTDGFF VCSIGEANPETIKAYIENQG



HP0088	617	GGCGAAGCCGCTTATGACAATGAAGGCACCTAAGCTTGTGATGAAATACGATATTTGAATGAAGAGCAGTATCAAAA TATCTCAGGAAGATACGAAGACAGGGGCTTTGTAGCGCAATGGCGGTGAAGCGATCAAGGATTTGTTAGAAGAA ATTGATTTGATCACCTTATTCAGAGTTTGAAGAAGAAAGTGAAGACACCAATCTGATGCGAAGAAAGAAAAAATC ATTAAGCGTTTGAAGTGGTAGAAAGCTTTTAAATCTGTAATAGGCTGAATGATGATGCTCACGGTTTACCG GIATGCCACCGGATTAAGGCTTTAGTCGCGTAGATGGCGGAAGTTGAGCTGAGCGGAGAAATCATGATGAATGATGTA TCGTCGTGTCATCAATCGTAACCAACGCTTGAACCGCTTAATGGAGCTTGAGCGCCAGCAATCATGTCGCGCAATG AAAAAGGATGTTGCAAGAAGCCGTGGATGCTTTTGTAAACGCGCCGAGCACTAATGCGGTTAAAGGGGCTAA CAACGCCCTTTAAATCGCTCAGTGAATCATTAAGGCAAGCAGGGCGCTTACGGCAAAACCTTTTAGGTAAGC GCGTGGATTTTCAGGCAGAAAGCGTGATGTTGGGCTAATCTCAAAATGGATGAATGCGG	618	GEAYDNEGTKLVMKYD LNEEQYQNR SRRYEDRGFVAQMGGEAIKDLLEED TLLQSLKEEVKDTNSDAKKKKLIKRLK VESFLNSGNRPEWMMMLTVLPVLPD RPLVALDGGKFVSDVNELYRRVINR QRLKRLMELGAPEIIVRNEKRMLEAV DVLFDNGRSTNAVKGANKRPLKSLSEII KGKQGRFRQNLGKRVD FSGRSVIW GPNLKMDEC
HP0088	619	TAAGGATAGAGGAATGAGGAAAAACCATTAATCAAGGGGTATATTTCAACCAACAGAAAGTAAGCATAATCTAAA AGCCCATTTGATTTAGTGTGTAATACAGAAAAAAGTTGTGCAAGGGATTTGAACAACCTTTATTAGCTGTATA GATGAGATAGCCACCAAGCAATTTCAATATCATTCGATGGAAGCGATATAGATCAATTCGACCTTAATGTTCAA TATATTCCTAGATGTCTATTAGTCCATTATTTCTAGAAATCAACAGATCACTACTATAGAGTTTGGCGTGATAAGA GATTTATCCCTTATTGCAAAACACCTTTTGGAAAGAAAAAATTTTGGACTGATGGTTTTTTGTTGCTCTATCGG TGAGGCTAACCCCTGAACGATCAAGCGGTATATAGAAATCAAGGTTAATTTACTCATAGGGTTTTTATAGTTCCTA GCGGAACCTAAGCATTCACCAACACATAAGATATTTGGGATTTCTGCTGGGTGTTTAAACCCGACAAATATT TTTCATTAAGCCCACTCCAAAGAGCTTTAAGGATATCCATAAATGATTTAACAACTCGCTCATAAACACCG CAAGTTTAGGGTTTTCTACTTATGATTTGTGGAAGAAATTTGCAAAATTAAGGAAATGCATGCTTGAAAGAGTGT CAAGAAATTACCAATAAAGAAAGTTTTTGCAAGTTCTAGCACAGGGAGCATTTGAAACCAATTTAGGAATGAA TTAAAAAACACTTTAGCGAATCAATGGCGATTTAACAGAGAAATTAAGCCATATTGAAGAAAGCCCTAATAAGAA TCAAAACCACTTTAACCAACTCAAAAGCAAGTTTTAGAAAAAATCACCCGCACACCTTAAACCCCTTTTTCAAA CCTTACAAGCCATTTTATACAGCCTTTTGCTCACAAAATACCCCTGATTTTTTGGTTTTTATTTTGACTATGTGG T	620	KDRGMKRNHYPLRGYIS NRSKHNK AHLIVCKYRKLLQGD LNFIKSVIDEI ATQSNFIIMESDIDHLHLMVQYIPRMS ISSIIRIKQITTYRVWRDKRFIP LLOKHF WKEKTFWTDGFFVCSIGIEANPETIKAYI ENQG
HP1298	621	ACGGCATTGAAAAATAAGGCTTGAATAAGGACAAGCTCATTTGAATAGGGTGCTAGGCAAGAGCGATAACGATCAG AAACCTATTGCGCTTTTGGATCGCATCATGTTCCCTATTATAGCCCTAGCGCTCAAGTGGTGGTTTGGAGGG CGCACCTTAAAGAAAAAGCGGCCAAGTATATCAATTCGCCCAAGTAAGCTTTTGTATAAATCCAGTTTGCTCTAT GGCTATCATTTGGCTAAGAACACATCTATAACAAAAAGCAAGTCAATTGAACAGAGGGGTATTTGGATGTGATTTTA TTGCACCGAGGGGTTTTAAACCGCCATAGCCACGCTTGGACAGCTTTAACGCCATCGCATTTGCCCTTGCTTAA AAAGGCGATCCCGAATCCTTTGAGCTATGATGGGATAAGCGAGGCGGCAACGAGCCTATAAAGCGAGCTTG ATGTTGGCTAAGAGCAAGGAGGGGAGGGTGATTTTGTGTTGAAACAACTGGATCCAGCGGATATGATCGCTA ATGGCCAGATTGAAACCTTAAAAAAATTGGCTATCGCACCCCATGGCTTTTATGAGTTTGTAAAGCGCATGGCGG ATTCCTATCTTTAGACGATCCTTTAGAAAAAGATAAGGCTCTTAAAGAAATGTAGGGTTTTTAAAAAATTTTCCCTG CTTTACAAAGCGAATACAGCCCTTAATCGCTACCCCTTTGCAAGCGCCCTTGCATGTTTAGGGATTAGAGAGCGA GTCTCTTTTCAGCCCTTTTACCCCAACAGAAAAACCCCAATCGCCCTCAAGGTTTGGCATGTTCTAGCGCGCC AGTTTGGAATTTTAGAAAAATTAGTGATCCGCTATCTTTTAGAAGACAGAGCTTGTGATTTAGCGGTGGGCTAT ATCCATAGTGGGTATCTTGCATAAAAAACAAGAAATTTGACGCTTTGTGCAAGAAAAATTAGACGACCCCTAAATTA GTTGCGTTATTATT	622	GIENKGLNKDKLIELGVLGKSDNDQKT YLRFLDRIMFPIYSPSAQVVGFGGRTL KEKAAYINSPQSKLFDKSSLLYG YHL AKEHIYKQKQVIVTEGYLCVILLHQAGF KNAIATLGTALTPSHLPLLIKGDPEILLS YDGDKAGRNAAYKASLMIAKEQRRG GVILFENNLDPADMIANGQIETLKNWLS HPMAFIEFVLRMRMADSYLI.DDPLEKDK ALKEMLGFLKNFSLLLQSEYKPLIATLL QAPLHVLGIRERSVFPFYPKTEKPNR PQRFHVSSAPSLFLEKLVIRYLLEDR SLLDLAVGYIHSVFLHKKQEFDALCQ EKLD DPKLVALLLDANLPLKKGGEKE LRLILRYFERQLKEIPKSSLPFSEKMIC LKKARQAIMKLGQELVAI

HP1298	623	CGCTCTATGGCGGATTCGGTGGCGAATTTGTCATAAAATTCAGGGATCACGATAGATATTGGAGGGGTAG CACCGAGTGGCGTTGATTGAAAAAGGCAAGATTAGGACTTAATCTCGCTTGATGTTGGACGATTCGCATTAAAG AAATGTTTTAGACAAAGACTTAGAGGTCAAAATGGCTAAAGCCTTTATCCAAAAGAAAGTCTCTAAACTGCCCTTTAA ACACAAAACGCCCTTTGGGTGGGGGACGATCAGAGCGTTGAGTAAGTATTGATGAAACGCTTTTGTACCCCT ATTGATCTTTGCATGGCTATGAATAGATGCACATAAAATTTAGCGTTTATTGAAAGTATGATGATGCTCAAAAGAAAG ATCAATTACGGCTTTAGGGGTGAATGAAGAGCGTTTGGATAGCATCAGGAGCGGGGCTTGATTTATCAGTCGTT TTGGAGCATTTAAACCTTTTAAATGATCACTAGTGGGTGGGTGAGAGAGCGGTGTTTGGAGGATTTT GGCCATCATTAACATAAATCCCGCCCAATATCAACCCCTCTCTCATCTTTTAAAGATCGCTTTTGGCCCATGA AAAGCACAGCCAAAAGGTCAAAAAGAAATCGGTGAATTTGTTGAAGCCTTATCGCCTTGCATAAAATAGATGAAA ATACCTTTTCCATTTAAAGATTGCGGGGGAATTAGCGAGCATGGTAAGATTTTAAGCGTCTATTAGCCCAAGCA CAGCGC	624	LYGGIACANLLHKNSGITIDIGGGSTEC ALIEKGKIKDLISLDVGTIRIKEMFLDKC EVKLAKAFIQKEVSKLPFKHKNAFGV GTIRALSKVLMKRFCCYPIDSLHGYEID HKNLAFIEKIVMLKEDQLRLLVNEER DSIRSGALILSVVLEHLKTSMTSGVG VREGVFLSDLLRHHYHKFPPNINPSLIS LKDRFLPHEKHSQKVKKECVKLFEALS PLHKIDEKYL FHLKIAGELASMGKILSVY LAHKHS
HP1298	625	CAAACTTAACGCACCCAAACCTTATTGAAATGTTTGTAGGAGTTAATCTGCCAAAGCCAAATATTATTCTAAAA AGAAGAAAGAGAAAAAGAAAGATGATCTTGAATTTTGTAAAGATATTGAAATTTCTTTTGAAGCTATCCAAAA CAACCAAGCCTGATTTTAAATAAAGACGAGCTTTTAGGGGATTTATCTTAATCTTAAATTTAGATTTCTTTAAGAG AAGTGAGGGAAGACTTTTGAAGAGAGCGTTTAAAGATGATGAAGCGAGTTTGGAGCGTATGTGTTAGTGTGCTT AGCTGTAAGTATTTGAGAGCGTGTGTTGAAAAGTTCAAGATGGCTAGATTTTATCGCTAGGCTTATTGCTTTGAGA GGCCATGTGCACAAGATACTA	626	NLNAPKPLFECFVGUNLAKAKYYSKKE EREKEMILNFKIFEILFEAIQKQPKP DFKNKDELLGDYPNLKNLDSLREVRED FLKRAFKNDEASLGAYVLVLLSCKYFE SVFEKVQEWLDFIARLIALRGRHVHKIT
HP1298	627	AGACCAAGAAAGAGCTAACGACTCAAAAAGAAAGCTAAACAGCGCAACAGATCCCTGATCATAAAGAAACCTCAA TATGTCTCTGTTGATGACACAAAACCTCAAGCGCTGTTTGAATATATACGACACCTTGAATGTGAATGACAAAAGCTTT GGGATTTGGTTGGTAATAGCGCTTTGAAAGACAAAACCTTCTCTACGCTATGGATCTATTGGATTACAACTAT TTATCCATAGAAACCCCATTTATCAAAACAAAGAGCAATGGGAACCTTATCGGATTTGATTATCATCAGGCTCATTA GAGCAAGTCAATGGGTATTACAAACATTCTAAAGCGCTCAACAAAGCAACGCTTAAGTTTGTGTTAAATCAATGAG AAGATGCCCTTATGCCCAAGCGACTTTTAAAGAGTGCCAAAAGAGCGATCCTAATGCCACACGCTTGATAAGGG AGCGTCAATTGATGAGATAAGCTTTTGAACAACAAAAGAAATGTATTCAATACGCTAACGATGTGATCTGCAG ACCCGATGATGAAGTGTGTCGCCCTAAGAGATGAGATGGTAGCTATGCCACTAGCGGATAGCGTTACTCAAAAAC CCAATATCATTCCTCTTATAGCTGTAT	628	TKKEAKRLKKEAKQRQQIPDHKKPQYV SVDDTKTQALFDIYDTLNVNOKSFGDW FGNSALKDKTYLYAMDLDYNNYLSIE NPIIKTRAMGTADLIITGSLEQVNGYY NILKALNKRNAKFLKINENMPYAQATF LRVPKRSDPNAHTLDKGASIDENKLF QQKKMYFNYANDVICRPDDEVCSPLR DEMVAIPTSDSVTQKPNIIAPYSLY
HP1298	629	TCCTAGCGATAGCGCTGGAGAACTAATCTTGTGCGGACTAATAAGCCTGTATCAATTCATTTGAGAAATAGC TCAAAAAGACAAATTTGCTTCAGCGTATCTAACAGTCAAAATTAGAAATACCCACAAAGACACGAAAGTCTTAGCGTTAT TGAAGAGGAGTTAAAAGAGAGAGAAAGCAAGAGCGCAGAAAGAAATTGATTAAAGCAAGAAATCTTAACACCCACAG CCTACATCAATAGAGTATGATGCGGAGCAATGAACAGATTATCAACAAAGAAAATAAGAGAAAGAAAAGCAAAAA TTATCTTAGATCAAGCAAGCGCTAGAGACTCAATATGTGCATAATGCCCTTAAAGAAACCCCGTGCCTAGAAACT ACAACTACTACCAAGCGCTGAAAACGCTCTAAACATATTATGCCCTCTGAAATTTTGTATGATGGACATTCACCT ATTTTGGTTTCAAAAACATCACTCTCAACCTGCTATTTTGTGTTCAACCTGATGGGAAATGAGCATGACTGATG CCGCCATTGATCCTAACATGACCAATTCAGGATTGAGATGGTATAGATTAAATGAAATGCAGAAAATTTAAGCTCA TTAAAGACAAAAGCCCTTGTAAACAGTAATCAATAAGGCTATGGGAAATCCATTGACAAAATTAACAATATCAAAAA CTATGGTGAATTGGAGCGTGTGATTAAAAGCTCCCTCTTGTGAGAGATAATAAAAGCGGTTAAGACATGAATGAA GAAAACGATAAATCTGAACCTTCAAAAAGCCCAAGATTCAACCCCAAGATTATCCCAATGAAGAAAGCAACAGA TGACTCTTGTGCTATTTCCAGCATGAAAATTTGATTGGGTGGGTAGCGGCTTACGCATGTGATTGATACCGGT TCGGTTACTCCAGGATCGATGAGCACTGGACAGGTTCAAGATTGGGATGGATACATGATCACTTGCCTAAGAC AGGAGCGAATGATGAAAGCTTTAAAGATTGGTTGCATGAATCTCAAGATCGGTTCCGACCGCTAAATATTGGATTCT AGATGAAAGGACTAGGATTGCAGAT	630	PSDSAWRTNLVVRTNKALYQFILRIAQ KDNFASAYLTVKLEYPQRHEVSSVIEE ELKKREEAKRQKELIKQENLNTTAYINR VMMASNEQIINKEKIREEKQKIILDQAK ALETQYVHNALKRNPVPRNYYNYYQAP EKRSKHIPSEIFDDGTFTYFGKNITL QPAIFVQPDGKLSMTDAADPNMTNS GLRWYRVNEIAEKFKLIKDKALVTVINK GYGKNPLTKNYNIKNYGELEKLVKLLPL VRDK
HP1298	631	GAAACGATAAATCTGAACCTTCAAAAAGCCCAAGATTCAACCCCAAGATTATCCCAATGAAGAAAGCAACAGA TGACTCTTGTGCTATTTCCAGCATGAAAATTTGATTGGGTGGGTAGCGGCTTACGCATGTGATTGATACCGGT TCGGTTACTCCAGGATCGATGAGCACTGGACAGGTTCAAGATTGGGATGGATACATGATCACTTGCCTAAGAC AGGAGCGAATGATGAAAGCTTTAAAGATTGGTTGCATGAATCTCAAGATCGGTTCCGACCGCTAAATATTGGATTCT AGATGAAAGGACTAGGATTGCAGAT	632	TLVPIFHDEKLGWVGVTHTVIDTGSV PGSMSTGQVQRFGDGYMITCRKTGA DESFKDWLHESQRSVRTPKYWILDEF TRIAG

HP1298	633	TTTAAACCATGCTAAAAAACTCAAAGCTTGAATGGGTGGAGATTGTAGGGTGGAGCATTTGGATAAAGTGATTIA TTTAGATCAAGCCCATAGGCAAAACCCACGAAGCAACCTGCCACTTACACGGGAGTGATGGATGAAATCAGG ATTTATTTGCCGAGCAAAAAGAGCTAAATTTTAGGCTATAGTCGAGCCGTTTTAGCTTTAATGTTAAAGGAGGG CGGTGCGAGAAATGCCAAGCGGATGGGACATTAATAAGAAATGCACCTTTTGCCTGATGTGTAGTCCCAATGCCGA TAGCTGTAAGGGCGCTAAATACAAACCCCAAACTTAGAAATCAAGGTGAAGGCAATCCATTGCCGATGTGTTGA ACATGAGCGTGAAGAGGCTTATGAATTTTGTCTAAATCCCTAAATCCCGTGAAGTTAAAAACGCTTATGGATG TGGCTTAGGCTATATACATTTAGGGCAAAACGCTACGACTTTAAGTGGGGGGAGGCTCAAGGATCAAAATTAGCT AAAGAATTGAGTAAAAAAGACACAGGCAAAACCCCTTATATTTAGATGAGCCTACTACCGGTTTGCATTTTGAAGAC GTGAATCATCTTTTACAAGTCTTGCACTCTTGTAGTGGGCTAGGGGCTGATGGGGGATAAGGGCGGGAAGTCATTGCCGAGCGG TTATCAAAAACGCTGACTACATTAAGACATGGGCTGATGGGGGATAAGGGCGGGAAGTCATTGCCGAGCGG CACGCCCTTAGAGGTGGCGCAAAATTCGAAAAAACCCAAAGCTACACGGGAAATTTTAGCTTTGGAATT TATTTTTGCTTGGCTTTTATAGATTAGCGATCAAAACGCCGCAATACACCACTCTTTAAAAATGACTAAACAAGA AGTTAAGGACGAATACAAACAGCAAGAGGAAACCCAGAAATCAAGGCCAAATCCGCCAAATGATGCTAAAAACG CCACGAATAAATGATGCAAGAAATCCCTAAGCCAAATGTGCTGTACTAACCCACCCATTACGCCGCTCGCTCTC AAATTTGATGAAGAACCCCTGTGCTGTGCTGTGCTAAGGACCGGATTTTATAGCCATTAGGATTAAGGGCAT CGCTAGAGAGCATGACATAGAAATTTATAGAAATAAAACGCTCGCCAGAGAGCTTTATAGAGATGTGAAATTAACG CTGCCATACCAGAAGAAATGTTTGAAGCCGTGGCGATAGTCTTCGCTCAAGTGGCTAAATTAGAGC	634	LNHAKKTQSLNGVE VGLEHLDKVIYLI QAPIGKTPRSNPATYTGVMDEIRILFAN QKEAKILGYSASRFSFNVKGGRCCEK QGDGDIEMHFLPVLVQCDSCKGA YNPQTLEIKVKGKSIADVLNMSVEEAY EFFAKFPKIAVKLKTLM DVGLGYITLGG NATTLSGGEAQRIKAKELSKKDTGKT LYLDEPTTGLHFEDVNHLLQVLHSLVA LGNSMLVIEHNLDIKNADYIDMGPDDG GDKGGKVIASGTPLIEVAQNCEKTSY TGKFLALE
HP1298	635	TATTTTTGCTTGGCTTTTATAGATTAGCGATCAAAACGCCGCAATACACCACTCTTTAAAAATGACTAAACAAGA AGTTAAGGACGAATACAAACAGCAAGAGGAAACCCAGAAATCAAGGCCAAATCCGCCAAATGATGCTAAAAACG CCACGAATAAATGATGCAAGAAATCCCTAAGCCAAATGTGCTGTACTAACCCACCCATTACGCCGCTCGCTCTC AAATTTGATGAAGAACCCCTGTGCTGTGCTGTGCTAAGGACCGGATTTTATAGCCATTAGGATTAAGGGCAT CGCTAGAGAGCATGACATAGAAATTTATAGAAATAAAACGCTCGCCAGAGAGCTTTATAGAGATGTGAAATTAACG CTGCCATACCAGAAGAAATGTTTGAAGCCGTGGCGATAGTCTTCGCTCAAGTGGCTAAATTAGAGC	636	FFVLAFLDLAIKRRQ'TNSLKMTKQEVK DEYKQEGNPEIKAKIRQMMLKNATNK MMQEIPKANVVVTNPTHYAVALKFDEE HPVPVVAKGTDYLAIRIKGIAREHDIEII ENKTLARELYRDVKLNAAPIELFEAVA IVFAQVAKLE
HP1298	637	GGCTGATCGCACCGAGAGTGATTCAACGCTAAAAATATCTTAATTGATAATTTTTAGAAATCAATAATCGTGT GGGTTCTGGAGCCGGAGGAAAGCCAGCTCTACGGTTTAACTTTGCAAGCTTCAGAGGGATTACTAGCAGTAA AATCGGAAATTTCTTTTATGATGGCGCCACGCTCAATTTGGCTTCAACAGCGTTAAATTAATGGGTAATGTGTGG ATGGGCCGTTTGAATATGTGGAGCGTATTTGGCCCTTCATACAGCAGGATAACACTTCAAAAGTGACAGGGGA AGTGAATTTTAAACCATCTCACTGTGGCGATCAACACGCCGCTCAAGCAGGCAATTATCGCTAGTAACAAGACTCATA TTGGCACACITGGATTTGTGCAAAAGCGGCACTAAACATTTATCGCCCTCCAGAGCGGTTATAAGGATAAACCT AAGGATAAACCTAGTAACACCCAGCAAAATATGCTAAACAACCAACAGCGCTCAAAACAATAGTAACACT CAGGTTATTAAACCCACCAATAGCGCGCAAAACAGAAATTAACCCACGCAAGTCATTGATGGCCCTTTTGTCTGG TGGCAAGACACGGTTGTCAATATTGATCGCATCAACACTAACGCTGATGGCAGGATTAAGTGGAGGGTATAAAG CTTCTCTTACCACCAATCGGCTCATTTGCTATATCGGCAAGCGGATCAATCTGTCCAATCAAGCGAGCGGGCGC ACCCCTTTAGTGGAAATCTAACCGGGAATATCACCGTTGATGGCCCTTAAAGAGTGAATAATCAAGTGGGTGTTAT GCTTTGGCAGGATCAAGCGGAAATTTGAGITTAAGGCTGGTACGATACCAAAACGGCACAGCCACTTTTAAATAA CGATATTAGTTTGGGAAGATTGTGAATTTAAAGTGGATGCTCATACAGCTAATTTTAAAGTATTGATACTGGTAAT GGTGGTTTCAACACCTT	638	ADRTTRVDFNAKNILIDNLEINNRRVGS GAGRKASSTVLTQASEGITSKNAEIS LYDGATLNLASNSVKLMGNVWVMGRLO YVGAYLAPSYSTINTSKVTGEVNFNHL TVGDHNAQAQAGIAENKTHIGTLDLWQ SAGLNIIAPPEGGYKDKPKDKPSNTTQ NNANNQNSAQNNNSNTQVINPPNSA QKTEIPTQVIDGPFAGGKDTVWNIDRI NTNADGTIKVGGYKASLTNAAHLHIG KGINLSNQASGRTLLVENLTGNITVD GPLRVNNQVGGYALAGSSANFEFKAG TDTKNGTATFNNDISLGRFVNLKVDAH TANFKGIDTNGGGFNTLDFSGVTGKVN INKLITASTNVAVKN=NINELVVKTNV SVGEYTHFSEDIGSQSRINTVRLETGT RSIFSGGVKFKSGEKLVIDEFYYSWPN YFDARNIKNVEITRKFASTPENPWGT SKLMFNNTLGQNAVMDYSQFSNLTIQ GDFINNQGTINYLVRGGQVATLNVGNA AAMFFSNVDSATCFYQPLMKINSAQ DLIKNKEHVLKAKIIGYGNVSLGTNSIS NVNLEQFKERLALYNNNRMDICVVR NTDDIKACGTAIGNQSMVNNPDN

HP1298	639	TTTTAAGATCAATAATTGCGGACAGCGCCAAAGTAAGGAAGAACAGCCAGCCATTGGGTGAAATGCCCTAAATGTT ATGCGTTAATGTATCAATAAGAAGTGTTTAGTAATAACAGCGTGTTTGAAATGCCATTACCATTTCCGCATGAAAG CGGCTGAAAGGATTGAATTTTATCGGATGTGGGAGTTTGAAGAGTTTGACAAGCATTTACGGCTAATGATCCTT TAAATTCGTGGATAAGAGAGCTATAAACACAGCATTAATAAAATACGAAAGAGACTAACCGCCCAAGCTCAGTGA TCAGCGGTGAGGCTAAATCAACCGCATGCCCTTGAGATCGTGGTGTGTTGATTTAGCTTTATGGGGGGAGTTTA GGCTCTGTGAGGGCGGAAAGATCGTAAGAGCAATCAATCGCGCGTCTGCTAAAGAGAGCGGTTATTGATTGTTT CAGCGAGTGGGGGCTAGGATGCAAGATCCACTTATTCGCTCATGCAATGGCTAAACAGAGCGCGCTTTGAA CCGATTGAGTGAGGCCAACTCCCTTTCATTTGCTCTTAAGCGATCCACTTATGGGGGCTAGCGCATCTTTTG CTTTTAGGGGATCTATTATCGCAGAGCGGCGGATGATAGGCTTTGCGGGGCTAGGGTGAATTAAGCAAAAC TATAGGGGCGGATTTGCCTGAGGCTTTCAACAGCGGAATTTTATTAGAGCATGGCTTGATTGATATGATTGTC ACAGGAAGGATTTGAAGAAGACTTTGAGCGATCTCATGCTATGATGACGCATAAGACTTCAAAGATTTTAAAGTT TTAACATTGATCGGTTGCGTGTATTCTAT	640	FKINKLRTAPSKKEEQPSHWVKCPKCY LMYHKEVFSKYSVCLKCHYHFRMKA ERIEFLCDVGSFEEDFKHLRPNPLNIG VDKESYKQRIKKYKERTNRPSVISGIG AKINRMPLQIVVDFDSFMGGSLGSVEG EKIVRAINRAVAKREALLIVSASGGARM QESTYSLMQMAKTSAAALNRLSEAKLPF ISLLSDPTYGGVSASFALGLDIAEPGA MIGFAGPRVIKQTIGADLPEGFQTAEFL LEHGLIDMIVHRKDKKLTSLDIAMMTH KTSKIF
HP1298	641	CAAGAAGCGAAGTGGCAATGACGGGCGAATTGACTTTGACGGGGAAGTTTACCATAGGAGGGTTGAAAGAAAA GTTGATCGCTGCTTTAAAGCCGCGATTAAACCGCTCTATTCTGTCAAAAATTACGAAAGGGATTAGACGAGAT CCCTGCTGAAGTCGAGAAATTTAAACATCGTTGCGGTGAAACATCGCTGAAGTGTAGAAAAAACTTTGCTTTG AAATTTGCCATGAAGCAGGCATTATTGTTTAGGGCTTATGGGGGAGTTTAGGGCTAGCCTTGCAAGAATGGG GGCGTTTTAAAGCGTTATAGGCTATGATCATAACGCTTTCATGCTAAATTGGCTTTGACTTTGGGCGTTGTAGATG AATGCGTGGGATTGAAAGATTTAGAATGCGATGTTTTTGG	642	RSEVAMTGEITLSGEVLPIGGLKEKLI AFKAGIKTALIPVKNYERDLDEIPAEVR ENLNIVAVKNIAEVLEKTL
HP1298	643	CTGATGGCTAAGCATAGACCCCTAAAGCAAGCAAGTCAATACGATAGCTCAATCGTTTGAAGACGGCACACCC CCTGAAAAAACGGGATTTGCTTTTTGCTCCACATCATCAATCCTTAAACACACAGGCAAGGGCAGTGATT TTACCCCATGGGTGCTATTAGGGGAATGCTGAGGTGCAATCAGAAAAATCTTTAACAAAAAGGCTATATTAA GGCGTGATAGCCTAGCCCCCTAATCTTTTATGGCACTTCCATTCCTGATCGTGTGCTTTTAGACAAAAAGAAAC GCGCGCGCAGAAAGGGCGTTTTCATGATAGATGCGAGCAAGGATTTAAAAAAGACGGCAATAAAAAACCGCTTGA GGGAACAAGATGTCCAAAAATGATAGACACTTTTAAACGCTTACAAAGAAATCCCTTATTATCCAAATGGTAAGCC TAGAAGAAATTAGCGCTAACGACTATAACTTGAATATCCGCGCTACATTGCCGCCAAACAGAAATCAGAAAAAGAC TTGTTGCTTTAATCAACAGCCACAAAGCTAGTTATTGCCCCAAAAACGAAATAAAGCCCTACGCCCTTATTITCAA GTGTTTAAAGAGCTTAAAAACACGCTTTTAAAAAGAGCGATAAAGAGAGTTATTACGCTTTAAAAACAGAAATGCGAA AACATTAAAGAAATTAATCAATCAAGCTCAGAAATCCAAACCTTCCACGCTTCTGTTTAAACGCTTTTACCCGATTGG ATTIATTTGAAACCTTIGACCATTTAGAGCCAGGTTTA	644	DGLSIDPKSKQVINDSFNRFEDGTPPE KNGDFAFLHHIISLKNKTGKAVILPHG VLFGRNAEGAIRKNNLTGYIKGVIGLA PNLFYGTSPACVIVLDKENARARKGVF MIDASKDFKDKGNKNRLREQDVQKMI DTFNAYKEIPYYSKMVSLEEISANDYNL NIPRYIAKPESEKDLFALINSHKASYLP KNEIKAYAPYFQVFKELKNTLFFKKSDE SYYALKTECENIKELIQSSEFQTFHASV LNAFRLDLFETFHDLEPGF
HP0072	645	CAACAAAGGTTCAACTATTTTAGGGGTTTTGCGTAAAGCTATTCTATGAGCGGAAGAAAAACAACATTTTAGGC TTGTATGATGAGCATTTCTTGCTCACTAAACGAAACCTTAGTGGCATCCTCGTTTAGAAGGGGTAGCTACACC CATTTAAGCACAGAGCAATTGCAAGATCTTTTACCGAGCGCCAGATGGCTTGATTTTAGAANAAGTCGTGGC GCGCTTGTTGTTAAAGCGGTAAATTTGATCACCACAAACATTCATCTGATCTCAATACCTGCAAGCGGATTTT GAATCAATTTGAAAAACAAGAGTGATGAAATCAGTATTTTATGTTTTAGAAAGCACTCACTCTTTGCATGGCGTT TTGGAGCATAAAGAAAAATCTCTCATGCTGCTAATAGGGAATTTTAAAGGATATTCTCTTATAAAGCGCATTTT TGCAAGAACTTTAAAAAGCTTAGAAATCCAGCTCAAAAATTATGCCCCAAACTCTTAAGCTCÇAAAGAGGTTTTGA ATTTTATCGGGAATACATTAAATGGTTTGATCTCCCTTAAACCTTAGTAGGGGGTATTGAGCGATAGCTATA TCGCTAGTTCTATCACTTTGAAAAAGATTATTTCAATCAAGAAAGCTTTAATCAAAAACCTTACAACCGCTTGATTGG CATTAAAGCTTATGAGAGCGAAAGGATCACTCTATAGCGATCGAGCGCTTTTATACAAAGAGAGGCGCAAGCTTTAGATAT TATCTTCTATAGAGCTATGAGTGTGATATAAAGCGTGAATTTTAAAAAGAGAGGCGCAAGTTTAGCATGTCCAA TCTCGTTAAAAACGAGCTATTAGAATACCAAGAACTGGTCAAAACCAACGCTATCCATGCAAAAATTCGCCCTAA CATTCTTATCAAGCCCTAGTTTAGAGAAATTTAGACGCTCAAAACAGCTTGGTTTAGGGCTTTTATTATTAAGAAAA TTAGTG	646	KQKVSNYFLGVLPKSYSMSSENNILGL YDEHFLTKNENLVGILRLEGVSYTHLS TEQLQDLFTERQMALDLSLEKVVARLV KRRKIDHQNIQSDSQYLQAILNQFEN KEYENQYFLVLESTHSLHGVLEHKK SLMHANRENFKDILSYKAHFLQETLKS LEIQLKNYAPKLLSSKEVLNIFYAEYING FDLPKPLVGGYSDSYASSITFEKDYC FIQESFNQKTYNRLIGIKAYESERITSA GALLYQETPLDIIFSIEPMSVHKTLSELP ERAKFSMSNLVKNELLEYQELVTKRLO SMQKFALNILIKAPLSLENLDAQTSVLG LLFKENLVGVIETFGKGGYFSFFPERU HLNHRFLTSKALACLMMVERON

HP0072	647	ATGAACTCACCCAAAGAGTAGACAAGTTGATGCTCCACTATGCTGGAGAAATGGCTAAAAACGCAAGAAAA AGGCATTAAGCTTAAGCTATGTAGAACGGTAGCTTTGATTAGTCCCATATTATGAAGAAGCGAGAGCTGGTAAAA AGACTCGGCTGAATGATGCAAGAAAGGCGCACTCTTTAAACCCGGATGATGTGATGGCGTGGCAAGCAT GATCCATGAAGTGGTATTGAAGCGATGTTCCCTGATGGACAAAACCTCGTAACCGTGATACCCCTATTGAGGCCA ATGGTAAATTAGTTCCTGGTGGTGTCTTAAATAATGAAGACATCACTATCAACGAAGGCAAAAAGCCGTTAGCG TGAAAGTTAAAAATGTTGGCGACAGACCGGTTCAATCGGCTCACACTCCATTCTTTGAAGTGAATAGATGCTTAG ACTTGACAGAGAAAAACTTTCCGTA	648	IMKLTPKELDKML-YAGELAKRKEP IKLNVVEAVALISAHIMEEARAGKTA ELMQEGRTLLKPPDDVMDGVASMIHE GIEAMFPDGTGLVTVHTPIEANGKLV GELFLKNEDITINEIGKAVSVKKNVC DRPVQIGSHFFHFFIEVNRCLDFDREKTF GK
HP0072	649	CCCTTTGAGCCTGAAATCAATCCAGAAATTTGCAAGGGGCTTTAATGGATCTATGATGTTATTTAAAGAAAT CCATGTGGATTTGCCACGAGCGCTAGGATCTTAAACAAATCACGCTCACTTACCAAGATATTGATGGCTCTATCCA TTCTAAAGTCGTGGCATTGATAAAGGCAATGATTGGCATTACCTTTAAACCTCTCCCAACACACCCCTTGATCCAGC CGCCTTTGAAAAACGCTACCAAGATCCAGACTTTGATTTTAAATGGCAAGCAACGATGATTTGCGTTCCCTTA TAAATTTTACGCTCCTTTGCTAGTCAATCCTTATAGAATCGTGTAGACACGCAAAAAGGCCCTTTGGATATTTAT CAAAACATGGATTTAAACCAAGAGTTTCTTCTCACATTAAAGTCGGCACGCAAAAGATTATTACCGCATCACGCTC ATTTAGACGGGAAATACCGCTATCTTTTGGAGAAACCGGGCGTATGAATTAATAATTGA	650	PFEPEINSKNLQGGFNGIYDSYFKEIHV DLPTSARILKQITLTYQDDIDGSIHSKVVG IDKGIOWHYPLKLSQHTLDPAAFEKRY QIQDFDFLMASTNTVILRSPYKILRSFVL VNPYRIVLDTQKGIPLDIYQNMMDLNQKF FSHIKVGTHKDYRYRITLILDGKYRYLLEE KNGAYELKL
HP0072	651	AAGGAGTTCTATCGTGATGCTTTGGTGAGTTGAAGACAATCTATCATCGCGCATTTAGCGAGCGCAGATATGC AATTACCCATAAGCTATCGGATCGATCCGAAGTTGGCCTCTTTGAGCGGCTATCAAGCCCTTAGATCTATACGCTT TAAGCGGATTAATTTGAACCCATTAGCATGGAGCGCTACACTTTGTGGTGTATATAAGACTTACTGCTAGAAAACC CTAAGCTTGGCGTGGTGAATCGAGCAATGAAGTGGCGATGGAGAAGTTTAAACAAAGAGATCGCTTTTGGT GGCCTTATCCAAACCATTTCTCAAGCCTTAGAATCATAGATAAAATGCCCTTCAAGCTCTCTAGTTTGAAGAAGTG CTGGAATTAGACAAAGAGTTAGGGAGCGTTTAAATGTAGCGGAGTGTAGTATAATAAGATTTTGGCTTCTAATA GCGTTTATTCTCAATTAGGAGTTTATGGGGTTAAATAATAAATCAAGGGTTTATTAAGAGAGAAATGCCTTTTGT GGTAGATATGTTCTAGTTTAAAGGGGCGCAAAACATTTATGATGAATCAATCATGAATTAAGGAAATGCTAGA GGCTAA	652	RSSIVHALVEFEDNSIIAHLASADMQLPI SYAIDPKLASLSASIKPLDLYALSIAKFE PISMERYYTLWCYKIDLLLENPKLGVLN ASNEVAMEKFLNKEIAFGGLIQTISQAL ESYDKMPFKLSSLI:EVLELDKEVRERF KNVAGV
HP0072	653	CTAAAGCCCATTTGATTTTAGTGTAAATACAGAAAAAGTTGTTGCAAGGGGATTTGAACAACTTTATTAAGTCTG TTATAGATGAGATAGCCACCACCAAGCAATTTGATTATCATTCGATGGAAAGCGATATAGATCATTTGCACTTAATGG TTCAATATATTCTAGAAATGCTATTAGTTCATTTCTAGAAATCAACAGATCACTACTTATAGAGTTGGCGTGAT AAGAGATTTATCCCTTATTGCAAAACACATTTTGGAAAGAAAAACTTTTGGACTGATGGTTTTTTTGTGCTCTAT CGGTGAGGCTAACCCCTGAACGATCAAGCGGTATAGAAAATCAAGGTTAATTTACTCATAGGGTTTTTATAGTTT CTAGCGGAACTAAAGCATTCATCCCAACACTAAAGATATTGGGATTTCTGCTGGTGGTTTAAATTCATTCTT TTCTAACATCTTATTAAAGCTCTTGAATTTTCTAAATTTGGCTTAGCGGATTCAAAAGCTCTCTATCTTCTTTGG TAAGATTTTCTTAAAGTGGCTTTCTAAAGATCATATAATAGCATCACTCCATCTCAACCCCTCTTGTGTGGC GCGTAAAGCATGATAATAGATAGTTGGGCGCATTTCTGTTTTTAAATAATCCAAATTCCTGATAGCGGAACATAG ACGCATAGAGAAATTAATAAGCTCTCAATTTTCTATATTTCATAATCCCTAAATTTTGCAGTTTCTTCTCAG TAGCGTCTAAGGGCTTCTTAAATCCAAATTTTCTATATTTCATCTTCTGCTGATTTGTTCTTCTTAGCAT GCTTTCTATGAGCGTTTCAGCAAACTCTCTCAATCGCTCAATCAATCTTCTGCTGATTTGTTCTTCTTAGCAT TTTTTTTAGCACCAAAATTAAGAGTGGGCAATCCCCCTACTTTGATGGCTCAGCGCATTTGTTAGTCGCATC	654	LKAHLILVCKYRKKLLQGDNLNFIKSVID EIATQSNFIIAMESIDHHLHLMVQYIPR MSISSIRIKQITTYRVWRDKRFIPLLQ KHFWEKTFWTDGFFVCSIGEANPETI KAYIENQG

HP0072	655	GGAAGGGGAACGAATTTCATCTCAATAACTCAAGCTTGTTGAATTTCAATGGCAATAGCGTTTCAACGCTCCTGT GAGTTTTATGCTAATCATCTCAAAATTTCTTTCACATAAATAGCGACTTTAAATCTGACGCTTCTTTGATTTAAGCA ACACAGCACCTGAATTTCAAGCGTTCTTTAAATGGTCTCTAAACCTTTAGGCAATGGCAGTAACAATCTAG CGATCAACGCTAAAGGAATTTAGTTTGGTCTAAAGGATTTGAATCTGTCTTATGAATCTATTTGGGGG ATAAAAACTTCGGTTATGATGTGTTGCAAGCCCAAAATATTGATGGCTTAATGGGAATAACGGCTATGAGAAGA TCCGTTTTATGGCATAAGATTGACAAGGCTGATTACTCGTTGATAACGGCTTCACTTGGAGATTCACATAACC CGCTCAATACGACTGAAACGATTACAGAAACCTTGATAACACCGCTTGAAGTGCAGATCTCTCAAAACGGCGTT TCTAATAAAGATGTTCAATCTCGCTCCTAGCTTGATGATTACCAAAAACCTTATAATGAACCGAGAAATCTCT ATAATTACACAAGCGATAAGGTTGGCATTATTATTAACGAGCAATATCAAGGCTTAAATCAAAACAATAAAACACC CGGACTTATAACGGCGCAAAACCAACCTTACAAGCCTTACACATTTACATCAGGCTATCATAAGCAAGATTTGAA CATGATCGCCAGTTGGTAAGGAGTTTTGCTAAATAGCCAACTTTTATCTCAGGGCTT	656	EGETNFNLNSSLNFGNSVFNAPV FYANHSQISFTKLATFNSDASFDSLNI STLNFQSVLLNGALNLLGNGSNNLAI AKGNFSFGSKGILNLSYMNLFGGDKK SVYDVLQANIDGLMGNNGYEKIRFY IQIDKADYSFDNGVHSWRFTNPLNTE TITETLHNRLKVQISQNGVSNKMFN LAPSLYDYQKNPYNETENSYNYSKDV GTYYLTSTNIKGFNQNNKTPGTYNQIN QPLQALHIYNQAITKQDLNMIASLGKEF LPKIANLLSSGA
HP0072	657	GATAAGATAGATATTGACACGCTAATTGGAGTTTGTGCGCTCAAGGCTTTTTGTATGATTTATACCATAAAGTAA GTGGTTTTACAGGGTATAGGCATTTGAAGAGATTTTGAACCGCTGAAGAAAAGGGCGCATCCTTAAGGGCTTT AAGGAAAAATTTGATCTAGAGTTTTAAATAGCCAGATCAAGCCTGAAGGATTTCCAAATCAATTTAGGGATTA AAACCTTGATGATCGCTATTGTTAAAGACGCTAACAAACCTTATTGAATTGCCCAACACATGTTTATGAGCAT TGCGATGTTTTAGCACAAACGAACCAACCCCAATAAAATCGCCTTAGAATTTTAT	658	DKIDIDTPNWSFVASRFLYDLYHKVS GFTGYRHLKEYFENAEKGRILKGFKE KFDLEFLNSQIKPERDFQFNVLGIKTL DRYLLKDANNPIELPQHMFMMSIAMFL AQNEQEPNKIALEFY
HP0072	659	GGGCGTTACCATTTGATCGCGGTGAAAGCGCTTAAGAGCGAGCAATTAGCTAAATGCCACGATTAAAGCGGA TTGTTGTGGATATTGAGCAAGAAAAATGCGTGAAGTCGTTGATTGAAATATCCAGCGAGAGATTTAAACCCCT TGGAATTGGCTAGATCTTATAAGAAATGCTTGAAGCTATCAATGACCAAGAGAGCTGTCTAAATCGTTAAAA AATCCGAGCGCATGTGGCTAATATCATCGCTTTATTGACGCTCTCTTAAGGTTCAAAACGCTCTTTTAGAAGAAA AAATCACTTCAGGGCATGCAAAAGTTTTGGTGGTTTAGATGGAGAAAACAGAAATGATCTTAAATCCATTATAG GGCAGAAACTCAGCGTGGCCAGACAGAAATTTAGCGGTGATTTTAAATAAACGCAAAATTTGACAAATAAAAA CATGTTTCAAGCAACCCCAACGCTCATCGCTGGAGATGAATGAGCGCTTGAATCAAAAGTTTGTGGATCATTA CAAGCTTAAAGCGGCTTTGAAAGGGAATAAAATCGTTTTACGATGTTATGAAAATCTCTTTTAGAGGCTTTTATGAA AAATGATGCTTAAAGCTTGAATATCTCAAAATTTAAGCGATTTTGTAAAGATAGAGTTAATGTTTTATAACAAA TGCGAGTTTCAAAATATTTGTAGGATTTAGGAAAGAAATAGGTTATGAATATATCGGTTAACCCCTATTATAGCGG TCGTTTTGTGGTGTGTTGTTATTGTTATGGCGATGAATGTTGGGTATAGGCTTTGTTGGCTTTTATGGATAA CAGACAGGCGAGATAAAGGATAGCTTGGCTAAATCAAAACGGATAATGCCAAAGTGTGGAGATTGGCCATCAAA TTGAGGCTCTTCTTAAAGAGCGGCTGAAAAACGCAGAGAAATAATAGCAGAGCGATTCAAAAAGCCACAGAGTCC TATGACGCTGT	660	GRYHLIAGERLRASKLAKMPTIKAIV DIEQEKMRVALIENIQREDLNPLELAR SYKELLESYQMTQEEELSKIVKKSRAHV ANIMRLTLSSKVQNALLEEKITSGHAK VLVGLDGEKQELILNSIIGQKLSVROTE DLARDFKINANFDNKKHGFQKQTTLIA GDELERLNQSLWDHYHKLKAALKGNKIV LRCYENSLLEAFMKKMMMS
HP0072	661	AAAAGCTTTCACATTTCAAGAGCTTGAGCGGTGATTACGGCATGGTGTAAACGCAGAGTGGCTGAAACTTTA GAAGAGGTGGAAGGCAATTATAAGCATTTCCAAAACGCTTTGAAATGCAAAAAGTGGGCAATCGCTAGGGT AGAAACCTTAGGCGCTCAAGTGGCTTATGATAAGGCCATATCGCTAGCTAAGGCTAAGACGTGTAGAAAGTTT CGCAGCTCTCGTTCAATTCATTTATCTAGCAAGGACGATTTAGTGCCTTCAAGCAAAATTAGAGATCCGACCGGAG AAAAATCTGCCCCGATCTGAGCTTTTTTTGTTCTTCCACGCTCAATCTTCCCAAGTGAGTTTTTTGGCTTTATATT TTCAATCTCTAAAGAAACACGAAATTACAGATCGCTAAATCTTGGCGGTGGCGGCGCATGCTATTCTTT GAAGCAAAACAAATTCGGTGTGTTGAAGACATGATCCCTAGTTGTTGTTGGCGGTGGCGGCGCATGCTATTCTTT CTCCACAGGGCGCATTTCAAAATACCAAGCGAGCAAAATTAGCGAGTTGCAAGTGAAGTGAAGCAAAATCCAGGC TAAAAAAACATGGAATTTAGTGAATAAGACTTATAAGAGACGCTTTCTTATTGAAGAAATACAAAAGCTTGCTT TCTAGCGTGAATTAGCCAAAGGAAACTTAAACCTCAAGAGCAGGCTTTTACAGGCTTAAGCAACGACGCTCA AGTCATTGATGGAGGAACACGCTTCTCTATCGTGTGGAGCAAAAAGCGTGGCTTATAAATACATCGTTTCATT AGCGAATTTAATGGCGTTAAGCGCATCATATTGATTAT	662	KKLSTFQELVSYYGMLNAEVAETLE EVEKGHYKHFNALKMQKVQIARVE TLGAQVAYDKAHIASVKAKDVLEVSQL SFNSILSSKDDLVPSKLEIRTEKNLPD LSFFVSSTLNSYPVLKLTLENOIQISKEN TKLQIAKFLPQVSFFFGSYMKQNNNSVFF DMIPSWFVGAVGRMPII SPTGRIQKYCC ASKLAELQVSSEIQAKKNMELLVNKT YKETLSYLKEYKSLSSVELAKENLKE EQAFLOGLSTNAQVIDARNTLSSIVE QKSVAYKYIVSLANLMA LSDHIDL

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HP0765	663	AATGAAGGCAATGACTTCTAGAGGAAGCAGAGAAGTATTAAAGCTGTGGCTTCTGATTGTGAGTTTGCTCTTGC GAGATTGAAGAGAAAGGCTATATTAGAAATCATGTAAATTCAGAAATTTTGACCACTTTTAATCAATTAGAAGGA TTCGAGCTTACCAACAAAAAGATAGCATGGAAATATCCAACTCGATGTATCAATACACTAAAAATTATTGATAAAA ATCTCAAGATGAGCTCTTTGACACCTTGGTGCCGTTGGAAATGTTGTGGAGGTTTTCTATGGATTGTTGTTGG CTGCTGGAGGTATAGTTGGAAGTGTAGGCTTTTAGCCGACCCACACTCGCTATTTTGGAGCTTTGAGAGCTGCT GAAATGGAAAAAATTAGAAGATGCTAAGGCTTATTGCTCTCAAGTTGAAGCAGCCGTCAAAAAAGCCGATGCGAT GATTGATAATCTCAAGCCGTTAGGAAATGGCAGATCTTTCACTAGGCAGATCACAAAAATTTGACGCACTGTTTT CTCGCTTGCTCAAGAGGCAATCGCCACGATGAAAAAGCACAACTACGATTTTTCGCAATTACAATCAAAAAAGAACAA ATCAGCTAGCTACTGCTTCTTCAACCTTAAACTTTGGTGCTTTTGAAGTGCTTATCATGGACAAACACCAAAA AGCTCAATGAAGCTACACAAAGTAAGCTAGATTATGCAAGGGAGATGAGTAGCCTAGAAAGCTAAGCATTATGAT TCAGTTAAATCAAAATTTGATTGGTACGCAGATTATTG	664	NEGNDLLEAEVIVKAVASDCEFAAF FEKRCYIRNHVISEFLHFNQLEGFE TNKKDSMENIQDVSNTLKIIDKNLKM SFDTLGAVGNVVGFSMGFLAAGG VGSVGLLAGPTLAIFGALRAAEMEKKL EDAKAYCSQVEAAVKKADAMIDNLQA VRKMDLFTTRQITKFDALFFSLAQEAIA TMKKHNYDFSHYNQKEQDQLATASST LKTLAGAFLKVPIMDKHQKLNATQSKL EFMQREMSSEAKHYDSVKIKFGLVRR LF
HP0765	665	CATGTTTGGCGGCAGAAATTCAGCGATTTGCCAGAAGCCGCTGTCTAGTGAAGATTAGACGATATTTAAGCT CTATTTTGGGAAAGAGGCTTTTCGCAAGATTTCTCAAAAGATTTCTCAAACTCGCAAGCTTTCTGGCTTTAATTTTCCAAATTT CGCCCTGAAATTTAGACATAACCGCCGCTTTAATGTCTGTCTTTAGACACCTTTTAGGCAATAAAAAACAAGT GAGCATCAATAATGAGACTTTAGCCTTAAATCCCTATTGCGTGGAGAGGGCGAAAGATTAGGGTTCGCAACA AGGGAAACGGGGGAGCACTAGGGCGATTTGCTCTAGAGATCCATATTGAAGAAGATGAATGTATAGGCG CGAGAAAGATGATATTACCCAAATCTTTGATTACCTTAAACCGCTCTTTTGGAGGGAAATTTGAAATCGCTAC TTGGCATAAAACCTTAAGCCCTAACCATTCCTTAAACCAAGCGATGCAAAATTCGCAATTAAGAAAAAGGGAT CAAAACAGAAAAAATTCGATGTGGGGATTTGATTGCAAGGCTGTTGATTGCTTAAACTGAAACGCTTTC TAATGAGTTGAAAGCGTTATTAGAAAAAGATTGTAAGGGAATC	666	MFGGQNFSDFARSRGPSEDLDLSSI FGKGGFSQRFQSNQSGFSGFNFA PENLDITAAALNVSLDTLLGNKKQVSIN NETSLKPIGVEEGEKIRVRNKGKTGR TTRGDLLLEIHEEDEMYYRREKDDITQIF DLPLKTALFGGKIEIATWHKTLTLTIPPN TKAMQKFRIKEKIKNRKTSHVGDLYL QARLIPKTETLSNELKALLEKEL
HP0072	667	GAGCATTATTATCCCTTTATATGGGTGGGCAAGATTCACGATGGTGGCATTGCGGATTGATGCAAAAAAGATG CTAATGAAGTGATCGTTGAAAAAGCTTTCCACTTTCAAGAGCTTGTGAGCGTGTATTACGGCATGGTGTAAACG CAGAAGTGGCTGAACTTTAGAGAGGTGGAAGGCAATTAAGCATTCCAAAACGCTTTGAAAAATGCAAAAA GTGGGCAATCGCTAGGTAGAAACCTTAGCGCTCAAGTGGCTTATGATAAGGCCCATATCGCTAGCGTTAAGG CTAAGAGCGTGTAGAAGTTGCGAGCTCTCGTTCAATCCATTTATCTAGCAAGGACGATTAGTGCCTTCAAGCA AATTAGAGATCCGCACGGAGAAAAATCTGCCGATCTGAGCTTTTGTCTTCCACGCTCAATTCCTACCCGCTT TAAAGACTTTAGAAATCAGATTCAAACTCTTAAAGAAACACGAAATTACAGATCGCTAAATCTTGCCCCAAGTGA GTTTTTGGCTCTTATATTAGAGCAAAACAAATTCGGTGTGTTGAAGACATGATCCCTAGTTGGTTGTGGCGTGG CCGGCGCATGCCATTCTTCTCCACAGGGCGCATTCAAAAATACCAAGCGAGCAAAATTAGCGGAGTTGCAAGT GAGTAGCGAACAAATCCAGGCTAAAAAACAATGGAATTATTAGTGAATAAGACTTATAAAGAGACGCTTTCTTATT GAAAGAAACAAAGCTTGTCTTAGCGTGAATTAGCCAAAGGAAACTTAAACTCCAAAGAGCGGCTTTTACAA AGGCTTAAGCACGAACGCTCAAGTCAATGATCGGAGGAACACGCTTCTCTATCGTGGAGCAAAAAAGCGTG GCTTATAAATACATCGTTTCATTAGCGAAATTTAATGGCGTTAAGCGATCATATTGATTATTATGAATTTGTTTATTA AGGGAAAAAATCATGT	668	SIYPLYMGGARFTMVRIADLMQKDAN EVYRLKKLSTFQELVSVYYGMVNLAEV AETLEEVEKGHYKHFNALKMVKVGGQ IARVETLGAQVAYDKAHIAVSKAKDVLE VSQLSFNSILSSKDDLVPSSKLEIRTEK NLPDLFFFVSSTLNSYPVLKTLENQIQI SKENTKLOIAKFLPQVSFFGSSYMKON NSVFEDMIPSWFVGAVGRMPILSPTGR IQKYQASKLAELQVSSEIQIAKKNMEL LVNKTYKETLSYLKEYKSLSSVELAKE NLKLOEQAFLOGLSTNAQVIDARNLTS SIVVEQKSVAYKYIVSLANIMALS DHID LFYEFVY

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HP0642	669	AGCACCACGATTTGCTGCAAAAAAATACGATCCTAATCGTGTATTTCCCAAAAGGATTGGGAAGCTTTGGTTGAAGTGGGGAGATTAGCCCTTCTCAATCGGCTTGAAACCATGGAAATGCTTTATTGAAATGAACGCATGAAAGAA GATTAAACCGATGGCTGGGGGCGCTTTGGTTGGAGGAGCGGCAATTTTGTCATTTATCTTGGCGGAAA AGCGTTACTTATGACAGCGATTACGTTAAAGATGATGATGAGTTAAAGGATTTATGACACTAATCTAG GTTGCTCAATCATCAAAATTTCCAGAGAACGATATGAACTCAATAGCGAAGCTTTGTTGATTGGGCTAG CAAGCAGACTTATATCCAAATGGCAACATGATGATGCGAGCGCCATGTTAGGATTGATCTTGGCCGATTGAAG GGTATGATCAAGAAAAGTGGAGGCTTATTTAGAGGAAAAGGCTATCTGAACACGGCGAATTTGGCGTGTGCGTA ATGGCTGTTTGGTTATCGTAACCAAGAAATCACCCCTAAACCCGCTGGAAGACAGAAAGTTATTTATGAAGTGATT GAATAAAACGCTGTTAGCTTTTGATAACCAACCATAAAGCTTGGCGTTAGCCAAAGTCTAATCTCTAAATGAT GCCTATTGATGTTGATAAAACAGAACTACCAACACACAAATTAAGTATCTTTAGGTATAATCAAAACTATTTTAAA TAAAGGGTTTTATGCTTCTGTTTGGCGCTTCCGCTACAGGGGATATGCACATAGGGAATTAAGGGCAGCCATTTC AACTACATTGTGGCTAAACAGCAATATAACCCCTTCTCATTCGATTGAAGACACAGACAAAGAGCGCAACATTGAA GGCAAGACCAAGAGATTTTAGAAATTTTAAAGCTTATGGGGATAAGCTGGGACAAAGCTCGTGTATCAAAGCCATAA TATAGATTACCAC	670	HQRFAAKYPNRRISQKDWEALVE GRLAPSSIGLEPWKMLLLKNERMKEI KPMAWGALFGLGASHFVYIYLARKG YDSYVKKVMHEVKKRDYDTNSRFA IKNFQENDMKLNSERSLFDWASKQT QMANMMMAAAMLGIDSCPIEGYDQEK VEAYLEEKGYLNTAEFGVSVMACFGY RNQEITPKTRWKTEVIEVIE
HP1173	671	CGTAGTGGCTGACCTAAAGAATTAGAAACAACAAAAAGCTCTAGAAAAAGAAAGCTAAAGAACAAAG CGCAAAAGCACAAAGATAAAGAGAAAAAGAAAGAGCGGTGCAAAAAATAGAGCCAAATTTAGAAAAATCTC ACTAACGCTATGATGACCCACAAATTTGAGCAATAACAAAAATCTTAGCGAATTTATCAAGCAACACGAGAAAT GAATTAGACCAATGGAACGACTAGAGGACATGCAAGAACAGGCTCAAGCTAATCGGCTCAACAAATGAAGAACT CAACAAGAAACAAGCTGAAGAGACAATCAAGCAAGAGCCAAAGATAAATCAATATTAAAGACAGATAAGCCTCAAAA AAGCCTGAGGATAACTCCATAGAAATTTATCTCTAGCGATAGCGCTTGAGAACTAATCTTGTGTGCGGACTAATAA AGCCTGTATCAATTCATTTTGAGAAATAGCTCAAAAAGACAATTTTGCTTCAGCGTATCTAACAGTCAAAATAGAAATAC CCACAAGACACGAGTCTCTAGCGTTATTGAAGAGGAGTTAAAAAGAGAGAAAGCAAGAGGAGCAAGAAAGAAAT GATTAGCAAGAAATCTTAACACACAGCCTACATCAATAGATGATGCGAGCAATGAACAGATTATCAACAA AGAAAAATAAGAGAAAGAAAGCAAAAAATTTATCTTAGATCAAGCAAGGCGCTAGAGACTCAATATGTGCATAATGC CTTAAAGAAACCCCGTGGCTAGAACTACAACTACTACCAAGCGCTGAAAACGCTCTAAACATATTATGCCCTC TGAAATTTTGTGATGGCACATTCACCTATTGTTTCAAAAACATCACTCTCAACCTGCTATTTTGTGGTTCAA CCTGATGGGAAATTGAGCATGACTGATGCCGCCATTGATCCTAACATGACCAATTCAGGATTGAGATGGTATAGAGT TAATGAAATTGCA	672	VDAPDPKELEEQKKALEKEKEAQA QKAQDKREKRKEERAKNRANLENLT NAMSNPQNLNNKLNSEFIKQORENE LDQMERLEDQEQQAANALQIEELN KKQAEETIKQRAKDKINIKTDKPKSPE DNSIELSPSDSAWRTNLVVRTNKALYQ FILRIAQKONFASAYLTVKLEYPQRHEV SSVIEEELKKREEAKRQKELIKQENLNT TAYINRVMMASNEQINKEKIREEKQKII LDQAKALETQYVHNALKRNVPVPRNYN YYQAPEKRSKHIMPSEIFDDGDTFTYFG FKNITLQPAIFVQPDGKLSMTDAADP NMTNSGLRWYRVNIEAEKFKLIKDKAL VTVINKGYGKNPLTKNYNIKNYGELE VIKPLPLVRDK
HP1173	673	GGGATTGGCGAGTTAGTCATTAGCAGCTTTGGCTTTAAAGGATAATAAACCTTTATGCGTTCAGTAAGGAATTTAACA CGCTTTTAGTCATAGACCTACAAAGAAAGAGATTCTTGAAGTTTATGGCTTGCCTAAAGAGATTAAATAATATCAGTG CTGGAGGTTTAGAAACGATGAGCTTGTCTTGTGAGCTATGAGAAATAATAAAATATCTCTACACCTTAATTTTA AACTCTTTAAAGCTACTTTTCTAATATATTAACCGCATTAGAAGATGGTGGCTATTTTAGAATAGAGGAAAGTCCGG GCTACATTAGACAAAAT	674	GLGELVISTLALKDNKLYAFSKEFNLL VIDPTKEEILEVYGLPKEIKNISAGGFRN DELVLVSYENNKNILYTLNF

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HP1173	675	TTCCTTTATTTGGTAAACGCCTGATTTTGGCAACTCTGCACGCCTTATCAATTTCAAAGGGAATACGAATTTTAAATCA AGCCACGCTCAATTTAAGGGCTAAATAATATCCATATCAATTTCCAAGCGTTTCTACTTTTAAACAAAACCTCTACGATG AATTTAGCTGAAAGTTCCCAAGCGAGCTTTAAGCTCTTAAAGTGGAAGGGAACGAATTTCAATCTCAATAACTCA AGCTTGTGAATTTCAATGGCAATAGCGTTTCAACGCTCTCTGAGTTTATGCTAATCATCTCAAAATTTCTTTCA CTAAATTAGCGACTTTAATCTGACGCTCTTTGATTTAAGCAACAACAGCACCCCTGAATTTTCAAGCGGTTCTTTT AAATGGTGTCTAAACCTTTTAGGCAATGGCAGTAACAATCTAGCGATCAACGCTAAAGGGAATTTAGTTTGGGTC TAAAGGATTTTGAATCTGTCTTATATGAATCTAATTTGGGGGATGATAAACTTCCGTTTATGATGTGTGCAAGC CCAAATATTGATGGCTTAATGGGAATACGGCTATGAGAAATCCGTTTTTATGGCATAACAGATTGACAAAGGCTG ATTACTCGTTTGATAACGGGCTTCAATCTTGAGATTCACTAACCGCTCAATACGACTGAAACGATTACAGAAACCT TGCATAACAACCGCTTGAAAGTGCAGATCTCTCAAAACGGGCTTCTAATAAAGATGTTCAATCTCGCTCCTAGCT TGTATGATTACCAAAAACCTTATAATGAACCGGAAATCTCTATAATTACACAAGCGATAAGGTTGGCAGTTATTA TTTAACGAGCAATATCAAAGGCTTTAATCAAAACAATAAACACCGGACTTATAACGGCAAAACCAACCCCTTACA AGCCTTACACATTTACAATCAGGCTATCACTAAGCAAGATTGAACATGATCGCCAGTTTGGGTAAGGAGTTTGGC TAAAT	676	PLFGKTPDFGNSARLINFKGNFTNFNQ/ TLNLRANKNIHINFQGVSTFKQNSTMNL AESSQASFNALKVEGETNFNLNSSL NFNGSVFNAPVSFYANHQSISFTKLA TFNSDASFDLSNNSTLNFQSVLLNGAL NLLGNGSNNLAINAKGNFSFGSKGILN LSYMNLFGGDKKT:SVYDVLQAQNDGL MGNGYEKIRFYG QIDKADYSFDNGV HSWRFTNPLNTTETITETLHNNRLKVQI SQNGVSNKMFNLAPSLYDYQKNPYN ETENSYNYSKVGTYLTSNIKGFNQ NNKTPGTYNQNCPLQALHIYNQAITK QDLNMIASLGKEFLPKIANLLSSGALDN LNSPNSFETLFGIFE:KYGITLNQENWKS LLKIINFSTNTNYDFSQGNLVVGAKE GQTNTKSWWWFGGEGYKEPCAVGDN TCQMFRTQNLGQLLHSSSTPYLYGINAN FRAKNIYITGTSGNAWGGGGSANVS FESGTLVLNQAKIDAQGTDKIFSYLE QGGIEKLFGEKGLGNALSNIYEESLND NAIPKDLANMIPKDF:GSKTLLSLLSPT VNNLLGVSAFKNAIMEILNSKTVGDVF GENGLLNALDPTERKKIDQMLLEQIQA HSSGFEKFIKTLG
HP1173	677	CTTCAGACGCTATCAATCAAGACATGATGCTTTATATTGAACGGATCGCTAAATCATTCAAAACTCCCTAAAAAGGG TGCATATTATGTGAGAGGCTTACGGATGATACGCTTTAGTTAAACCCGTTTAAAGCCATTATGAATTAGCCG CCAATCGGCTTATAGGTGATGAAAGTCCCTTATACAATACGGCGTAATCCTAACCAATTGCTTTTTCTTCTTACG GCTCTACCAACCTATCGGCTAACGACTCCCTAGAGAACAGAAATGAAACAAATCGTGTGGAATCTTTTTTTTCAA CCGATCGGAACGATTTGAGTAAATTCATTCTATTTAGATAATGAGTTCAATCCCAACAAACAGCAAGATGAATCG CATGAATAAAAAATTATCTTTTAAATCTTTTGTGTTAGCGAGTCTTGTGCTAGAGAGAGGACGCTTCTTCAAAACCTT TTTGATTTGATTGATAAGGGGATCAACAGAGAAACAAGAAATTAAGAGAGCAGGAGCAAAAACCGCTTAAACTGGC TCAAAGCCCTTTAGTAGCGTTAGAGATTGTCCCCCAAGAAACGCCCTATTAGAAATGCAATCAAGGGGCTAGGAGTGGT ATTATTTAAGGTGAGCGCTGATGTGAGAGCGTGGTTATCTTAAATTTGACATCAATCAAGGGGCTTCTTGGCTCG CTCTACCCACGCTTAAAGCGTTTCTTTAGTGAGGAATCAAGCGTAGCCTATGAAATTTTATGCGAAACCAACCC CTATGGATAGAAAGTAAAGCACCAATTTAGGCAACGACCTTTTCAAGTTTAACTTGAACCAACATTAAAGATGCCTT TAGCATTTTAAACCCCTTTATCCAAATAAGTTTGGTTAATGCTAGGCGTGTGTTTAAACAAATTGATCAAAGG ATTGTATGAATGGTGGCTCCATTCTATAGATGTGGCTACGCAACATTTAGTTGCCATAGTATTAAAAATAAGCGTGGT AAAAATTTTGA	678	SDAINQDMMLYIERIAKIQKLPKRVHIN VRGFTDDTPLVKTFKSHYELAANRAY RVMKVLIQYGVNPNQLSFSSYGSTNPI APNDSLENRMKNRVEIFFSTANDLS KIHSLDNEFNPHKQOE

HP1173	679	AGCGGGATAGGGCAAGCGGAATGGCACAGGAGCGTGTGTTTGTGGCGGATGTCAAGCAGAGCATTTATGCCCTTT AGGGGAGTTTAGCTCTTTGTTTGAAGCGTTTCTAAGGATTTTACACGATAATTTGGAATTTAACCACCGCAGT GCGCTTTAATCATTAATTATGTGAACACCATTTTAAAAAAGCTTATCAAAATCCCCACCGCTTATTTGGAGCAAA AATACCTAAACCTTCTCAAAATAAACATGTTACAGAGCGCTATGTTAAAGTCTCTTAGTGCGCTGATGAAAGAGAATT GTTATTAGATCAGGCTTACAAGAGCTCAAAACCTTTTGAACATCGTATTGAGCCTAAAGATATTACCATTTTATGC GCCACTAATGACGAGCGTTTAGAAATCAAAAATTTTGAAGAGCGTTTGAAGTGGATTCGCCAAGCAGCGGAATC TAGCGCAAAATTGCTCAATTTGTAGAGTCTAAATCATTAAGAACGCTTGAATACGCTCTAGCGGAAGAACCTTA CAAGCCTTTTATAAGCACAGCGTTTAAAACTCGCTGGATCTTGATGATGCGATCGCTTAGCTGGTTTTAA CCCTAAAAAGAGAGCGTGGCAGCGTTTGTGTGAAGGTGATGAGCAATTTGAGCTTTATGAGAGCGCTGCACAA AGCTGTTTGAATTAGCGTTGGTGGAGATGCCGATGGATTTTGAAGAAATTAAGACTAAAGCGATCGCTTC TTCCATTCAAAAGCGCGCAGATCATGACCATTCACAAATCAAGGCGATGCAATTCCTTATGTGATCGTGTGCG AACGCTTGGCAAGCCTAATTCAGGCAATTCCAATCAACTCCTTGAAGAAATGACGGCACAGAGCTTCTTCGCTT TATTACAGAAATGAAAAATCGTGAGGTCGTAGATAAAGATTACGCTAG	680	AGIGQAKWHRSVFFVGDVKQSIYAFF GSFSSLFESVSKDFYHDNLEFNHRS LINYVNTIFKAYQNSPTAYLEQKYP SQNHVTDGYVVKVSLVADERELLDC VLQEAQNILLEHRIEKPDKITILCATNDD LEIKNYLQERLSAIRPSTESSAKLSQFV ESKIIKNALEYALAEPEYKPFYKHSVLK LAGYLHDDAIALAGFNPKKESVAGFW KVMEQFELYGEPAQSCLELAVGCEDA DGFLEKLETKAIASSHSHSKGAQIMTHKS KGMQFPYVIVCERLKGPNSSHSNQLLE EYDGTELLRLYYRMKNREVVVDKDYA
HP1293	681	AAACGAAAAAGCAAGTAACCTTAATGGATTTAAGCTCTAGCATGCTAGTGGGGTAGCGGCATCGCTCATTCCTT TCTTAGAGCATGATGACGCCAACCGTGCTTAATGGGGACTAACATGCAGCGCCAGCGGTGCCCTTATTAAAGAAG CGACGCTCCCATTTAGGCACGGGATTAAGAAATTTATTGCTAGGATTTCTGGGAGCGATCAAGCCAAATCGC GCAGGCGTTGTAGAAAAATTGATTTCTAAATAATTTATATTTAGCGAAAGCAAGAAAGCCTATATTGATGCG TATTCCTTTGCAAAAAACCTTGGCACCAACCAACACCCAGTTTCAATCAAGTCCCTATCGTTAAAGTGGCGGATAAA GTGGAGCGGGCAAAATCATCGCTGATGGCCCTAGCATGGATAGAGCGGAGTTGGCGTTAGGGAATAATGTGCGC GTGGCGTTTCATGCTTGGAAATGGCTATAACTTTGAAGACGCGATCGTGTGAGTGAGTGCATCACTAAAGATGATAT TTTCACCTCCACCCACATTTATGAAAAAGAGTGATGCTAGGAGCTTAAGCATGTTGTTGGAAGAAATTTACCGCTG ATATTCTGATGTGAAGAGAGCGCTCGCTCATCTTGATGAAGCGGATCGTTAAAGTCGGTACTTATGTGAGC GCTGGCATGATTTGGTGGCAAACTTCTCTAAAGCGGAGATTAAGACACGCTGAAGAGCGGCTTTTAAAGGG CTATTTTGGGATAAAGCGGCGATGTGGTCAATAAGAGTTTGTATTGCCCTCCAGTTTGGAGGACCGGTGATT GATGTGAAGTCTTCACTAAAAAGGCTATGAGAAAGACGCGGAGTTTGAAGCGGATGAAGAAAGAAAAAGCCAA GCTTGATATGGAGCATTTTATCGCTTGACCATGCTCAATAGAGAAAGAAATTTGCGCGGTAGCTCGCTCCTTCTCA AGCGATTTTAGAAGAGCGCTTTCAGC	682	NEKSKVTMLDSSSMLVGVAASLIPFL EHDDANRALMGTNMQRQAVPLLRSDA PIVGTGIEKIIARDWSWGAIKANRAGVVE KIDSKNIYILGESKEEAYIDAYSLSQNLNR TNQNTSFNQVPIVKVGDVKGAGQIAD GPSMDRGELALGKNVRVAFMPWNGY NFEDAIVSECITKDDIFTSTHIYEKEVD ARELKHGVEEFTADIPDVKEEALAHLD ESGIVKVTYVSAGMILVGKTSPPKGEIK STPEERLLRAIFGDKAGHVVNKSLYCP PSLEGTVIDVKVFTKKGYEKIDARVLSA YEEEKAKLDMEHFDRLTMLNREELLRV SSLSQAILEEPFHSNGKDYKEGDQIP KEEIASINRFTLASLVKKYSKEVQNHYE ITKNFLEQKKVLGEEHEEKL SILEKDDI LPNGVIKKVKLYIATKRKLKVGDKMAG RHGNKGIVSNIVPVADMPYATADGEPVD IVLNPLGVPSRMNIGQILEMHGLGLVGKE FGKQIARMLEDKTKDFAKELRAKMLEI ANAINEKDPLTHALENCSDDEELLEYAK DWSKGVKMAIPVFEIGISQIEKFYKLFEL AKIAMDGKMDLYDGRTGKEMRERVNV GYMYMIKHLHLV
HP1051	683	TGAGCGATTGAGAGAGTTTGTGAAACGCTCATAGAAAGCGTGAGAAAAAACTGCAAAAAATTAGGGGATTATGAAA ATATAGAAAAAATTTGGATTTAGAAGAGCCCTTAGACGCTACTATAGTTCCCTATCAGTGAATTTGGAAATTTTAA AGAAATAGAAAAAATGAGAGCTTTTAAATCTTCTATCGGTGAAAGCTAAGCCAAATTAAGCAAGGACGAGCAAA AACAAAGAAATGCCCGCCAACTATCTATTATCCATGCTTTACGCCCAACACAGAGGGTTTGAAGATGATGGAGTT ATGCGTAATTATGATCTTTTAGAAAGCCAGTTTAAAGAAAAATCTTACCAAGAAAGATAGAGAGCTTTTGGAAATCGCCT AAGCCAAATTTAGAAAAATTACAAGAGCTTAAATAAGATTGTAGAAAAAGATGGAATTTTAAACCCACCCAGCAGA AATCCCAAATATCTTTAGTTTGGGATGAATGCTTTAGTTCCGCTAGGAACTATAAAAAACCTTATGAGTAAATTAAC CTTGATTTTCTATACGCCCTTGATCGTTTCAGGGTTAGCCTCACCGATAGAGCAAAAAACCAATCATCAGTCCAAA AAGTTTTTCTTCCAAAAAGTGTTTTGAATAA	684	ERLREFAETLIESVRKKLOKLGDYENIF KILDLEEARRRYSSPISELEFLKEIEK ESFF

HP1051	685	CGCATTATTGCAAAAAGCCCTCAAACCTCTACGCTCTTTAAAGCCTTTAGAATTGAATGTGAGCATAGCCTCTAGCTT TTCTAAATAGGGAATTTGTTGGTAGGGAATTAGAACTCTTTGCGTGAAATCCAGCCCAAAAACACCCGCTGCTTT AAATAGTGAGAACTTTATTTAAAGCTTTTCCAAAAGGCGTTATCGCAAGATTTCATCGCAATTCGTGCTTTGAA GTCCTTAGCTTGAATGAAAAGATTTTGA AAAAATCGCTCGTTTGAAGAAATCTTAATAAAGCTTAAAAATTCG CTATAATAAATTTCTTTAAACGCGCCATATCCCCACAAAACGCTAGAGATGATAGA	686	ALLQKALKLYALLKPLELNVSIASSFSK GNLFGRELESFCVKIQPKNTRALNSEI LYLKFQKGVARIARISCEFCFEVFSLNE KDFEKIALVLEEILNKA
HP1291	687	ATGCGGGATTGCGTGCGGAATTTGTTGCATAAAAATTCAGGGATCAGGATAGATATTGGAGGGGTAGCACCGA GTGCGCGTTGATTGAAAAAGGCAAGATTAGGACTTAATCTCGCTTGTGTTGGGACGATTCGCATTAAAGAAATGTT TTTAGACAAAGACTTAGAGGTCAAATGGCTAAAGCCTTTATCCAAAAGAAAGTCTCTAACTGCCCTTTAAACACAA AAACGCCCTTTGGGTGGGGGACGATCAGAGCGTTGAGTAAGTATTGATGAACGCTTTTGTACCCCTATTGATT CTTTGCATGGCTATGAATAGATGCACATAAAAATTTAGCGTTCAATTGAAAATCGTCATGCTCAAGAAGATCAATT ACGGCTTTTAGGGTGAATGAAGAGCGTTTGGATAGCATCAGGAGCGGGCGTTGATTTATCAGTCGTTTTGGAG CATTTAAAACCTTTCTTAATGATCACTAGTGGGTGGGGTGAGAGAAGCGGTGTTTTGAGCGATTATTGCGGCCA TCATTACCATAAATCCCCCAATATCAACCCCTCTCTCATCTCTTTAAAAGATCGCTTTTGGCCCATGAAAAGCAC AGCCAAAAGTCAAAAAGAAATCGTGAAATTTGTTGAAGCCTTATCGCCTTTCATATAAATAGATGAAAATACCTT TTCCATTAAAGATTGCGGGGAATTAGCGAGCATGGTAAGATTTTAAGCGTCTATTAGCCCAACAAGCACAGCGC	688	GGIACANLLHKNSGITIDIGGGSTECALI EKGKIDLISLDVGTIRIKEMFLDKOLEV KLAKAFIQKEVSKLPFKHKNAFGVGGTI RALSKVLMKRCYPIDSLHGYEIDAHK NLAFIEKIVMLKEDQLRLLGVNEERLDS IRSGALILSVLEHLKTS.MITSGVGVR EGVFLSDLRLHHYHKFFIPNINPSLSLK DRFLPHEKHSQKVKECVKLFEALSPL HKIDEKYLFLHKIAGELASMGKILSVYLA HKHS
HP1291	689	TCTAAAACCACTTATGGCGTGTGAATCTCGGAGCTAGCGATGATTCTAGAGTGATAAACGCTTTTGATGAGATGAT CTATTTTAAATCTGACTACCAACTCGTTCTTTGCGAAACTCTAAAAGAGATGAAGAGCTTGCCAAATCCATTCTA AAACGCCACAAAATGCCATTTCTTTAGTCAATCAACCGGTTTGATAGAAATACCTTTATCTTTTAAAGAACGCTAGT TTGGATGGCAATGAGTCTCCATCAGCATTTGAGCGCTTTGTTGAAAATCCCTTATGCGTTTCATAGTCTCTTCGG GTCTCTCAAGCCCAAGATCCACCCCTACCCAAAGGAAGTTGGCCCTAATATCCACATGATCTATCCAAAGGATTTT CAAAAATAATTTCTAGTCTAGGACTGGATGTTTAAAGCCATGACTATGCCACACCCCGCAGTGGATTTTGTGAAC CCGCAAGATATTATAGCGCCATTAAACGTTTGGCCCATCTCTTGAAGAAGATGCGCCATCTAATACCAACGAA ACAACCTATTTTGAACGAGTTTGATTGCGTTATAAGTTTGAAGGATAACTTCAGCTTAGATTGTAAAGCATAAAA AGGAATTTCTAACCAACCAAAATTGAAAGCTTTCTTTGACACACCACTTTTAAAGAGAGCAGAAATGCTTTGGAA TTTTTGAAACGCTCACTCATTAGCGTATTTATTGCCCATTTATCTATTCTTGTAATAACGAGTTTATTTTAGCGTA AAGAAATTGATGATCAGTCTCATAGAAAAGCCCTTACATTCCTACCCCTAGCTCTTTATGAAAATTAGAGCAA CCACACACCTTGCTTTTGAAGCGCTGAGATT	690	LKPPYGVNLGASDDSRVYKRFDEMIY FLNPDYQLVLCGNSKKDEELANSILKR HKNAISLVNQTLGIEYLYLLKNASFAMG NESSITHLSACLKIPYAFIVSSGLSSPRF HPYPKEVGPNIHMIYPRDFQKIISRSD WMFKAMTMPHPVDFVNPQDIISAKR FAPHLLKEDAPSNNTNETTYFERV
HP1291	691	GCAAAAAGACGCTTGGGGTTCATCTATGAGATCAGCGAGTTTCATGAAGCCTATACCGCATTCGCTAAAAAACAA GACCGATACGCTATTATTGAGGTATCTCCCTCTAGGTATTGGCCAGCATTTTAAACGACTGCCCTTTATGTCAAA TACCTGATTTGACGCTTTGAAAAGCTTTTGGTGCTTATTATTACCAACTTGGATTGCAGGAGGCACGATCAGC CGCATCAAGCAACCAAGTATCAACATTATCAAAAACGTTTAAAGCAATAAGAGCGTTGAAACCATCAAGAGCTTATA TTGAATAGCATCGACTCTTATAACACCTTTGATCAATACCTCTATAACTTATGGATAGCTCTTCTGTTTATCATAGCA AATGGGTGCGTCTGCTTAGCCCTAGCTAATTATTTTCATGCGAGATGAAGAGAAACCCCATTTTATCGCTATGGATG CCGAAACCCCAAGTGGAGCATATTTGCCACAAACGCCCAAAAGAGGCGAGTCAATGGAAACGCGGATTTTGACAAAGA AAAAGAGAGAAGATGGGTAATAATATCGCGAATTTAACCTTTTAAAGCGTAAAGAAGACGCGCATGCTTTAAACGG GGATTTTGATGAAAAAGAAAAATTTATGGAGGCAAGACACGCAAGTATTAGCTGTTATGACATCACTAAAGA ATTGTATAGCAATTATAGGAAGTGAATGAGAAAGTCCCTCCAAGAGCGGATACAAATCTTTGTATAACACTATCACGCC TGTTTTACACATAGAGGGGCAAGAGATGATTTTGAAGATGATTTTGATCT	692	KKDACGFIYEISEFMKAYTALLKKQDRY VYLLRYLPTRYWASILTTALVVKYPDFD ALKLLVSYYYQTWAGGTITRIKQTSIN IKNVKSNTSVETIKELILNSIDSYNTFDQ YLYNLWDSSSVYHSKWVRPVLALANY FMADEEKPHFIAMDAETQVEHILPQTP KRGQWNADFDKEKREEWVNNIANLT LLKRKKNALNGDFDEKRIYGGKOT SKVISCYDITKELYSNYRKNWNEKSLQE RYKSLYNTITPVLHIEGQEDDFEDFD

HP1291	693	TACAGACGGCTATGTTAAAGTCTCTTAGTGCTGATGAAAGAGAATTGTTATTAGATCAGGCTTACAAAGAGCTCA AAACCTTTTAGAACATCGTATTAGCCTAAAGATATTACCATTTTATGCGCCACTAATGACGACGCTTTAGAAATCAAA AATTATTGCAAGAGCGTTTGAAGTGGATTGCGCCAGCAGCAATCTAGCGCAAAATGCTCAATTTGTAGAGTCT AAATCATTAAGAACGCTTTAGAATACGCTCTAGCGGAAGAACCTTACAAGCCTTTTATAAGCACAGCGTTTAA CTCGCTGGATACCTTGCATGATGCGCTTTAGCTGTTTAAACCTAAAGAGAGCGTGGCAGGCTTTGT GTGGAAGGTGATGGAGCAATTTAGAGCTTTATGGAGAGCTGCACAAAGCTGTTGGAATTAGCGGTTGGTGCGAA GATGCCGATGGATTTTAGAAAATTAGAGACTAAAGCGATCGCTTCTCCATTCAAAAGGCGCGCAGATCATGAC CATTCAAACTCCTTAAGGCAATGCAATTCCTTATGATGCTGTCGCAAGCCTTGGCAAGCCTAATCAAGCCATT CAATCAACTCCTTGAAGAAATGACGGCACAGAGCTTCTCGCCTTTATACAGATGAAAATCGTGAGGTCGTAGA TAAAGATTACGCTAGGCTTTAGACAAAGAAAGAGCGGCAAGATCATGAAGATTAATGTGATTATGTCGCATT CACTAGGCTGAGTTAGGCTGATTGCTGGCCAAAGACAAAGAAAGCAAAAGAAAGCAAAACAAACAA TGCAGGAAATTTGATCTTGTGCTTTAGAGAGGAGAAATCGCGCGTTATTCTCCACAAAGAGCCTTTA ATTACAAGCACTCTCATCAAGCCCCATGCCTATGGCGAGCAAGTCCAGAGATAGAAAGAGCCTAGCGATTATGA AAGAATAACGACACAG	694	TDGYVKVSLVADERELLDOVLQEAC LLEHRIEKPDTILCATNDDALEIKNYL ERLSAIRPSTESSAKLSQFVESKIKN/ EYALAEOPYKPFYKHSVLKAGYLHD AIALAGFNPKKESVAGFWKVMQFVI YGEPAQSCLELAVGCEADAGFLEKLE KAIASSHSGAQIMTIHKSKGMQFPYI VCERLGPNSHSHSNQLLEEDGTTELLR LYYRMKNREVVDKDYARALDKEEAAK DHEEINVYVAFTRAELGLIVAKDKKE SKESKNKTMREKLDLVPLEEGEIAPVI SPQKEPLITSLIKPHAYGEQVQIEEEE PSDYEKNNQDEAINFGIALHKGLEYY AYNIPKQSVLEYLNYHHGFYGLDYQAL EESLELFENDAEIQALFKNLPLKGEAAF LFQGVWSRIDVLLWDRGQNLVLDYKS SQNYQQSHKAQVSHYAEFLKTQAPHF KIQAGIYAHKRLEKLWV
HP0084	695	CGATGAGCCGGATTGGATTACGTAACATGAGCGCTGAAGAGTGGAAGCAGAGATTGAACGGCTGCTGAACAAA CGCCAAAGAGCCGATAAAGAACGAGAGCTCAAAAACAAAGAACCCAAACCAAGAGTACCCCAACAAA AGAAACCCCAAGCCCTAAACCGAACTAAAGCTAAGCTAAAGCCGATACCTGAAGAAATAAGCCCTCTA TTGGCGTGAGCAACCGTTAGGTGGATGTGCGCGCTTGATCATTGATGAATTAATCGCGAGCTTGTT AGGGAAGAAATCGCTGATCAGGATTTATAGCGATGTGGAAGAACGCTATGATGGGAAAGTTTATAGAGGAATTA ACAGGTGGTCTTCTATTTCAGCGGTAAACGACAGACTTGCGGTGATGAAACACGCGATGCAACCAAGT GGTAAGGTGTTCAATAAATCCCTCGCATGGTAAGGATTTAGCCGGAAATAGGCAAGAGCATTGAATTGATCA TTGAGGGCGAAGAACCGAATTAGACAAATCCATTGTAGAAGAGATTGGCGATCCGCTCATTACATTATCCGCAAC TCATGCGATCATGGGATTGAGCCTTAGAAGA	696	DEPDLDYANMSAEVEAEIERLLNKRQ EADKERRAQKKQKQAKPKQEVPTKET PKAPKTETKAKAKADTEENKAPSIGVE QTVRVQVRLDHLMLNIGELVLGNRL IRIYSDVEERYDGEKFEELNQVSSIS AVTDLQAVMKTRMQPVGVKNKFP RMVRDLSRELKSIELIEGEETELDKSI VEEIGDPLHIIRNSCDHIGIEPLE
HP0084	697	TTCCGCATGAAGCGGCTGAAGGATTGAATTTTATGCGATGTGGGAGTTTGAAGAGTTTGACAAGCATTATAC GGCCTAATGATCCTTTAATTCGTGGATAAGAGAGCTATAACACGCTATAAATAACGATTAAATAACGAAAGGACTAACCC GCCAAGCTCAGTGATCAGCGGTGAGGCTAAATCAACCGCATGCCCTTGACAGATCGTGGTGTGTTGATTGATTGCTTT ATGGGGGGAGTTTAGGCTCTGTGGAGGGCGAAAGATCGTAAGAGCAATCAATCGCGCGGTCGCTAAAGAGAA GCCTATTGATTGTTTACCGGATGAGTGGGGGCTAGGATGCAAGATCCACTTATTCGCTCTTAAGCGATCCCAATGGCTAAAC GAGCGCGCTTTGAACCGATTGAGTGGGCAACTCCCTTTCATTTCGCTCTTAAGCGATCCCACTTATGGGGC GTTAGCGCATCTTTGCTTTTATGGGATCTCATTATCGCAGAGCCAGGGCGATGATAGGCTTTCGCGGGCCTAG GGTGATTAGCAAACTATAGGGCGGATTGCTGAGGGCTTCAACAGCGGAATTTTATTAGAGCATGGCTTGA TTGATATGATTGTGCACAGGAAGATTGAAGAGACTTIGAGCGATCTCATGCTATGATG	698	FRMKAERIEFLCDVGSFEEDFKLRP NDPLNFVDKESYKQRIKKYKRTNRPS SVISGEAKINRMPLQIVVDFSFMGSL GSVEGEKIVRAINRAVAKREALIVSAS GGARMQESTYSLMQMAKTSAAALNRLS EAKLPFISLLSDPTYGGVSASFAGLDL IIAEPGAMIGFAGPRVIKQTIGADLPEGF QTAEFLLEHGLIDMIVHRKDLKKTLSLI AMM
HP0134	699	TCGTGCATAAAGATGGGTCCATTTAGAATGGTGGCCCTTGGGTATAAGTGCCTCTTCAAGCATAAAGATCAA GTCGCCCTTAGACGCACTAAGTAGGCTTTTAGCGAAGGCAAAAGCTCGTGGTTGCAAGCGAATTAGTAGGATAAAA ACGCTTGGCTTCTCAAGCTTTCTGCAACATGCAATTACAAGATGAAGCGGTGTTTATTATTCATTGCGGGGTA TCCTAATGTCAAGCGAAGCCTTACAAAAGAAATCGTAGCGCTTTAGAAAAGCTGAAAAGGCGGAATCACTCA AGCGGAATTAGACAAGCTCAAAATCAATCAAAAAGCTGACTTTATTCTAATTTAGAAAATTTAGCGGATGTTGCGGG GCTTTTGGGACTATTAGTGCAAAACGATATTCAAGGCTGACGGATTACCGGACCAATTTTGGATTAAAGT GAGCGATTGCTGCTGGCCAATGATATTTAAAGACACCAATCAACCCGCTGTTTGAACCTTAA	700	VHKDGVHLEWVALGYKVPAFKHQDQ ALDALSRLLGEGKSSWLQSELVDKRP ASQAFSHNMQLQDESFLFIAGGNPN VKAELQKEIVALLEKLKKEITQAEIL KLKINQKADFISNLESSSDVAGLFADY VQNDIQGLTDYORQFLDLKVSILVRV NEYFKDTQSTTVFLKP

HP0325	701	CCTTTCACAAAGCTTTGGCCGAAAAATAGCGGATATAGCGAGCGTGGTGGCGTAAGGGATAACACAGCTGATTGG TTATGGCCTGTGATTGGCTTAATGGCACACGGGATAAATCCGGCTCAAAATTCACCATGCAATCCATTCTAACAT GCTAGAGAGCGTGAATGTCAAAATCTCTGCAGATGATTAATCTAAATGTGCTGCGTGCAGTGATGATACAGCCTC CTTACCCCTTTGCAAGACAGCGGATAAAATGATATTCACATTTCTTCTATTGGGATGCAAAATCCATTCAAGG AGGACCTTGTGATGACCCCTTAATGCGGTAGATGGGAATTTACGCCCTCGCTCAAGGGGCTATCGTTTCGG GCAATCTAATAACTTGTCTCAGCCCAATATCATCAACGGGAGCGACTATTGAAAGGGAAGTTTCGTATGATTGTTCC ATAAAACGCCATGACTTTAAGCCTGAAAAACCCCAATTTTAAACCGCTATCCAAGTGCAAACACATTTAATAAAGT ATTTGGCAATAAGTAGCCATAGCGCTAGATCCAAAACCATTCAAATCACTCGCCAGAGCGTTTTCTATGTTGGA GTTTTAGCCTTAGTGCAAGAAATCCCTATTAAATACAGCGCGGAAAAATAAGATCATTTAGATGAAAAATCAGGCAC GATCGTTTCAGGAGTGATATAATGGTGATCTCTGTAGTGTTACAGCCAGACATCACGCTGAAATCAGCTAAAG ATCCCTTAATGATTTAAACACGCGAGGATTTAGACAATAACATGTCTTAGACACCGCTCACAAACAGCTGAGCT CTAACGGGAAAAACATCACCATTTGCCGGGTGGTAAAGCCTTACAAAAAATTGGCGTGAGCGCTAAGGGGATGGT TTCAATCTTGCAAGCCCTAAAAAAGTGGCGGATTAGCGCTGAATGGAGATACTATGATAAACAACAATAAAGCC ATGTTAGAGCAGTAC	702	FHKLLAEKIGDIAS'VGVVRDNLQIGYGL VIGLNGTGDKSGSKFTMQSISNMLESI NVKISADDDIKSKNVAAMITASLPFFAR QGDKIDHISSIGDAKSIQGGTLVMTPL NAV DGNIALAQQAIVSGNSNNLLSAN INGATIEREVSVDLFHKNAMTSLKNPN FKNAIQVQNTLNKVFNGNVAIALDPKTI QITRPERFSMVEFLALVQEIPINYSKN KIVDEKSGTIVSGVDIMVHPVWVTSQDI TLKITKDPLNDSKNTQDLDNNMSLDTA HNTLSSNGKNITIA3VVKALKQKIGVSAK GMVSILOALKKSGAISAEMEIL
HP0325	703	CGCTCTATGGCGGATTGCGTGCAGAAATTTGTTGCATAAAAAATTCAGGGATCAGGATAGATATTGGAGGGGTAG CACCGAGTGGCGTTGATTGAAAAAGGCAAGATTAAAGACTTAATCTCGCTTGATTTGGACGATTGCGATTAAAG AAATGTTTTAGACAAAGACTTAGAGGTCAAATGGCTAAAGCCTTTATCCAAAAGAAAGTCTCTAAACTGCCCTTAA ACACAAAACGCCCTTTGGGTGGGGGAGCGATCAGAGCGTTGAGTAAGGATTGATGAAACGCTTTTGTACCT ATTGATCTTTGCATGGCTATGAAATAGATGCACATAAAAAATTTAGCGTTCAATTGAAAAAATCGTCATGCTCAAAAG ATCAATTACGGCTTTAGGGGTGAATGAAGAGCGTTTGGATAGCATCAGGAGCGGGCGTTGATTTATCAGTCGTT TTGGAGCATTTAAAAACCTCTTTAATGATCACTAGTGGGTGGGTGAGAGAGCGGTGTTTTGAGCGATTATT GCGCCATCATACCAATAATCCCCCCTATCAACCCCTCTCTCATCTCTTTAAAGATCGCTTTTGGCCCATGA AAAGCACAGCCAAAGGTCAAAAAGAAATCGGTGAAATTTGTTGAAGCCTTATCGCCTTGCATAAAATAGATGAAAA ATACCTTTTCCATTAAAGATTGCGGGGGAATTAGCGAGCATGGGTAAAGATTTTAAAGCGTCTATTAGCCCAAGCA CAGCGC	704	LYGGIACANLLHKNISGITIDIGGGSTEC ALIEKGKIKDLISLDVGTIRIKEMFLDKDL EVKLAKAFIQKEVSKLPFKHKNAFVG GTIRALSKVLMKRF'CYPIDSLHGYEIDA HKNLAFIEKIVMLKIEDQLRLLGVNEERL DSIRSGALISVVLE:HLKTSMLITSGVG VREGVFLSLLRHHYHKFPPNINPSLIS LKDRFLPHEKHSQKVKKECVKLFELSL PLHKIDEKYL'FHLKIAGELASMGKILSVY LAHKHS
HP0325	705	AATGCTATAAGTTCAGCCAAAAATGTTTGCACTCATTCAAAAAAGACAGATTAGAGAGAAATTTGAAAAACCGCC CCAATCCATTAGACACCAAAAAATCTCTAAAGAGAGGCTCTCTAGCGTTACTGAAGAGATTATTTCAAAAAACAAG AAGAAATTACAGAGCAAGAAACCCAGAGGCAAGCATGATGAGAGAGACTCTCTAGCGTTACCGAAGAGATTATT TCAAAAAACTAGAAGAAATTGAAGCTAAGATAAAGGGGAATTAAAAAGGGCGTGAACGCTCTGTCTTAGCAA ATTGATCTTAGCGGCGTCTTTTGTAGATGAGTGAATCAGAGGGGTTTCGCCCTTCTATTATACCGACAAGACAGGGC ATCCACGATTGGCTATGGCTATAATTTAGCGGTTTATTCTATGAGGTAAGCGTATCACCAAAACATATGGGCTTT TAACTGACATACTCTCTATGGGTGGTATAAAAAATTTGGACGCAATGAGGAGAAATGGTCACTTGGATTGAGCTACA ATTTAGGCTTGAAACGGAAGTCAAAATTCAGCAATTCATCAAGGCCATAGAGGATAAAATTTATGCTTTGGCTGTGG AGAGACTGCAAAAAAGCCGTTATTTCAATCAAGTGAAGAAAGAGCGTCAAGGAATATGGAATTTGAAATTGGAGG GTTGCGAAAAACATTGTAGAAAAAATACGCAATAGAAAGGTGATCAAGAGGTGGGCTTGAGCTCAAAATCAAAA TCGGTATGCGGTAATTTTCAACGAATACGATCTGACCAAAACGCCAAGAGAGCTGAGAGGTTGAGAAG CCAAATAATCTATTTTGTAGAAAAACCCCTAAGGGCGGAGAGATTTTGAAGAATATTTGAACGAGGCTGATTT GCTTGGGGAATAAGGAATATTGTCATGCTAAAGAAATTTCAAAAAGGCCCTTTTATAGGCTTTGTGCTGGCGCGGT GTGTTATTGGGGGAGT	706	CYKFSQKMFALIQKKRQIRENLKNRPN PLDTKNSPKERLS'VTEIISKKQEELQ SKETPEGKHGDERLSSVTEIISKKLEE LKAKNNKGN

[illegible]

HP0419	715	CCCTAGCGGCGGTAAAGCACCCTTACAAAGTATTGCAAGAAATCCCAAAACCCATTTTCCCTTTCCAC CACCACGAGGAGCCAGAGAGGCGGAAGTTGATGGCTGCATTATAATTTGTGAGCGAAGAAGAAATCAACAAG GCATAGAAAGGCGAGTTTGTAGAAATGGCAATCGTGCAATACCACTACTATGGCACCTCTAAATCCCTGTAGAA AAAGCCTTAAAGAGGCGCAAAATCGTCATTTTGTATTTGATGTGCAAGGCGATGAGATCCTTAAAGCAATACCT AACGCATGCTCTGTATTAGCACCACCAAAACCAAGAGATTTAAAGAGCGTTTGTCTTTAAGGGGACGGAATCT AAAGAGACGATAGAAACCGCTTGATCAACGCTTATAAGAAATGCAGTCTTGGAGAGCTTTGATTACCTCATCATC AATGAAGATTTAGAAATCCAAAGAAATCATCTTAAGCATCGCTAAACCTTAGTCCATCGCTTAAAGCGTTTAAAT TTGAAAAATCTGTAAAGCTTGGAACCAACGAAACCCCTATAAACCTATCAATATTTTAAAGCTATAATTCAAAC AAAAACCAACCA	716	PSGAGKSTLTkYLQEKIPKTHFSLSST RKPREGEVDGLHYNFVSEEEFKQIE GQFLEWAIVHNHYHGTSKIPVEKALK GKIVFIDVQGHHEILKIKHYPNACSVFI TKNQEILKERLLRGTDJSTKETIEKRLIN YKEMQCLESFDYLIJNE:DLKSKSKEILSIA KTLVHRLKAFNFEKIKCAWKNETL
HP0419	717	CTTTGGGGTAGAGGATTGCGATGAAATAACCCCTAACGCTTTTGTGCTTATTTGCTTAGGGGTGCTATACCACA GAAAAGCCCGCTAGAGGCTTTAAAGCCCTTGATCACGCTTTGAAATAAAAGGGGAGCTGGTGTGGATACCTTA ATCATTGATTCGCCCTTAGACATCGCCCTTGCCTTAAATAAATGCTAAATGAAATAATGTTATTTATCCCA GTGTAGCGCGTTAAAGGGTGTGCGAAAGGTAGGTTGAAATTTGAGATTTCTAGCGTTTAAAGACCCACG CCTAAAGAACAGCGTAAACGGATTTTATTTGGGGCAGAGTTTGAAGATTTTGGATAAAACAGATCCCTCTAAA ACITTAGAGGGGTATGACGCCCTTTAAGGGGTATTTTAAATGCTTAAACCAAGCAAGCGTTAAATAAGGATTAA GATAGTGCAAGAAATCAGTCGT	718	LGVEDLHEKYPNAFDVIFCLGVLYHRK SPLEALKALYHALKIKGELVLDLIDSP LDIALCPKKTAKMKNVYFIPSVSALKG WCERVGFENFEILSVLKTTPKEQRKTD FILQSLDFLDKTDPS:KTLLEGYDAPLR GYFKMLKPSKR
HP0419	719	GCGTTTGGGTATTCAAAGGAAATTTTACATTAGCGTGAATGAAGAAATGAAAAGCCCTTTTGAATTTGTTACCCCT AACGCTAAATAATTGCAGGGTTTTTTCATTAGAAACCGACTATGTAGGCTTGGGATAGACCGGCAATGGCGTG TCTGGCGGTAAATAATGGCGTGGTGGTGGATGCGGGAGTGCATTACGATAGATTTAATCAAGAGGGCAAGCAT TTAGGAGGGTGTATTTACCGGTTAGCCCAATATATTCATCGGTATAAAAGCGCTAAATTTTAGAGCAACCT TTCAAGGCCCTTAGATCTTTAGAAAGTTTACCTAAAGCACTAGACGCTGTGAATACGGCATGTTTGTAGCGTCT ATTGCTGTATCCAGCATTTAGCCAAATCAAAATCTATCTTTGTGGGGCGATGCGAAGTATTGAGCGGCTT TTACCCCATCTGTTTGAAGGAGCGTTTGGTTTACGGGATGGAATCGCTCTTAAATAAGCAGGGGATACTAGA ATGCAATGATGCACAAATTTGAGTTTTTGGCATGTTTTAGCGCTTTGAGCATGCT	720	RLGIQEIFYISVNEENE:KALLNCYPNA KNIAGFFHLETDVYVGLGIDRQMACLAV NNGVVDAGSAITDLIKEGKHLGGCIL PGLAQYHAYKKSAKILE:QPFKALDSLE VLPKSTRDAVNYGMVLSVIACIQHLAK NQKIYLCGGDAKYLSAIFLPHSVCKERL VFDGMEIALKKAGILECK
HP0893	721	TTTTACATTAGCGTGAATGAAGAAATGAAAAGCCCTTTTGAATTTTACCTAACGCTAAATAATTGCAGGGTTT TTTCATTAGAAACCGACTATGTAGGCTTGGATAGACCGGCAATGGCGTGTCTGGCGGTAAATAATGGCGTGT GGTGGATGCCGGGAGTGCATTACGATAGATTTAATCAAGAGGGCAAGCATTTAGGAGGGTGTATTTTACCCGGT TAGCCCAATATATTCATCGGTATAAAAGCGCTAAATTTAGAGCAACCTTCAAGGCCCTTAGATTTCTTAGAAGT TTTACCTAAAGCACTAGACGCTGTGAATACGGCATGTTTGTAGCGTCAATGCTTGTATCCAGCATTTAGCCAA AAATCAAAATCTATCTTTGTGGGGCGATGCGAAGTATTGAGCGGCTTTTACCCCATCTGTTTGAAGGAGC GTTTGGTTTTGACGGGATGGAATCGCTCTTAAATAAGCAGGGATACTAGAAAT	722	FYISVNEENEKALLNCY:PNAKNIAGFFH LETDVYVGLGIDRQMACLAVNNGVVD AGSAITDLIKEGKHLGGCILPGLAQYH AYKKSAKILEQPFKALDSLEVLKPKSTRD AVNYGMVLSVIACIQHLAKNQKIYLCG GDAYLSAFLPHSVCKERL:VFDGMEIA LKKAGILE
HP0410	723	TGAAGTGAGCATCACGCAAAAGCGGGGATTATGGAGCGGATTGATTATAGAAAAAGCGGCATCAAGTGGCGG GTTCAAGTCAAACGCTACTCGCATAAAGTTTGCCTCAAGCCATTCAAGAGGTGCTCTTCTAAAGCTTATTACGCT TGCGAAGAGCTTGGTGATCACCAACAGCTATTTACGCAAGCGCTCAAAACTGGCTCAAGCTAACGAAGTCT CTTGATTGACAGAGACGAATGGTCAGGTTTTTGAACGAAAGAGATGAACCGATCCCATCAGATCGTTTGTCTCA AGTCTTTTAAATTTTGTGTAATTGCATGCGCTATAATGCCAAATTTAGCGTCAATTTCTGCTTGATAAGGGGAT TTAATGATTCAAGTCTGTTGCGCATCAAAATTTAAGAAATTTAAGAACACTAAATTTGATGGTTTACCAACTTAATAT TATCACCGGCCAAACAATGCGGGCAATCCAATTTGTTAGAAGCGTTGTATTATTGGTAGGTAAATCCATGCACCC ATGCACTAATGTATTAGAAATTTATGACAATATACGCAAGAGCCCTTAACATCAGAAATCAAAAGCTTAATGTTTTAT GGTTAGACACTAAGGAAGAAATACAGATTGTTACAACCTTAGACAACATCAGACCTTGGACTTGCAAT	724	EVSIQKSGDYGADLIEKDGKWAQV KRYSHKVSPKAIQEVVSSKAYYACEKA CVITNSYFTQAAQKLAQANEVLLIDRDE WVRFLNEKR
HP0410	725	CACGAATAAGAGGGTAAACATATTCGCTAACCGCCGTAACGCTTCTATTTAGTGGTAGAGCCTAAGATTAAAGC GCCTTTTGATGGGAATTACGCATTGAACGGTTTATGAAGAGTCTGTTGAGCGTGAAATAATGGCGATCAAGAAG CTAAATTTGTTTAAAGGAGAGCGGATATTGTCAAGCCAAAGCAATAGCCGGCTTGGCGGTAGATTGAGGGGAAA GTGATTTGCCCTTATGCTAGTGGGCATAAGGTGCATAAGGGGGAAGTATCGCTGATATTATCAAGAGGGGCTGAA TGTGCCCTA	726	TNKEGNIANRRNASILVVEPKIKAPFI GELRIETVYEEVWVSVKNGDQEAQFV RRSDIVKPSLAGVGGKIEGKVLYPYA SGHKVHKGGSIADIIQEGWNP

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HP1067	727	ATCAAGCGATAACCCGCTAGCCGATGAGCCGGAATTTGGATTACGCTAACATGAGCGCTGAAGAAGTGAAGCAGAG ATTGAACGGCTGCTGAACAAACGCCAAGCCGATAAAGAACGAGAGCTCAAAAAACAAGAACCCAAACCCCA AACAGAAGTTACCCCAACAAAGAACCCCAAGCCCTAAACCGAACTAAAGC	728	SSDNPLADEPDLDYANMSAEVEAEIEQ RLLNKRQEADKERRAQKKQEAQPKQE VPTKETPKAPKTETK
HP0650	729	CCTTAAAAAATTGGCTATCGCACCCCATGGCTTTTATTGAGTTTGTAAAGCGCATGGCGATTCTCTTTTAG ACGATCCTTTAGAAAAAGATAAGGCTCTTAAGAAATGTTAGGGTTTAAAAAACTTTTCCTTGCTTTACAAAAGCGA ATAAAGCCCTTAATCGCTACCTTTTGCAAGCGCTTTGCATGTTTAGGATTAGAGAGCGAGTCTCTTTTCAGCC TTTTACCCCAACAGAAAAACCAATCGCCCTCAAGGTTTGCATGTTCTAGCGCGCCAGTTTGGAAATTTT AGAAAAATTAGTGATCCGCTATCTTTTAGAGACAGAGCTTGTGATTAGCGGTGGCTATATCCATAGTGGGG TATCTTGCAATAAAAAACAGAAATTTGACGCTTTGTCAAGAAAAATTAGACGACCTAAATTAGTTGCGTTATTAT AGATGCGAAATTTACCCCTAAAAAAGGGGTTTGAAGAAATTCGCTTTGTTGATTTGCGCTATTTTGAGCGCCA ACTCAAGAAATCCCTAAAGCTCGCTCCCTTTTAGCGAAAAATGATCTGTTTAAAAAAGGCTCGCCAGGCCATTAT GAAATTAACAACAGGAGAAATTAGTCGCCATATGAAAAAGATTAAAGCTTTAGCCTTATTCAGTGGGGTTGGATAGT TTGTTGCCATGAATTAATCATGATCAAGGCATTGAAGTAACCGCTTGCACCTTAATATAGGTTTGGGGGAAT AAAGATAAAGAGAGTATTTGAAACGCCACCGCGCAATTTGGGCTAAGCTCTTGGTGTGCGATATTAGAGAGCA GTTTTTTAACGATGTGTTCAAGCCCAATACGGCTATGGGAAATTTCAACCCCTTGCACTTGACTGCCATGCCAA CATGTTTAGGAACGCTTTTATAAAATGCTTGAATGAACGCGGATTTGTTTGAAGCGGGAAGTGCTAGGGCAAC GCCCTAAATCC	730	LKNWLSHPMAFIEFVLRMRMADSYLLDC PLEKDKALKEMFLGNFSLLLQSEYK PLIATLLQAPLHVLRIRERSFQPFYPK TEKPNRPQRFQFAHVSSAPSLFLEKLV RYLLEDRLSLDLAVGYIHSVFLHKKQ EFDALCQEKLDLDPKLVALLLDANLPLK KGGFEKELRLILIRYFERQLKEIPKSSL PFSEKMICLKARQAIMKQKQELVAI
HP0650	731	ACAACGGTCCAGTTGACGATCCAGAAAGGCTCTACCGCATGAATCAGCGCTTACAGGTTAAGACTGATGAA ACCTTAAACTCATTAAAGAAAGCCAAAGCGTTTGAATTATAACGATGATATACGAGATGTTTGAAGGCTTTT AATATTGTCCGCGATTCCACTATTATAGCATTAAGATAGACCAAGCGTGTTGTTAGCGGTAAACCCCT TCTAAAGAAAGCCTTTATTTTGTTCAAACAACTAAACCCCATGTTGATTATCTAGGGCGGAATTTTCCCTT AAGCGATGGGTGTTAATTTGTCTCCCACTTTCTAATCTTACTGATAAAAAATCCGGAGTCTATTAAATGA AGCCATTGCATTTTACACCTGGACAGAGCAATCAGCGGATGTTGGGTTTATCATTAATAAAACCTCGTTTATT GGTTTTTCTTATTGGTGGTTGAATACCGAGTATTTCTATGCTAGCATGCTGGAATTAATAAAATCCTTTT AGAAAGAAATCGTAAAAAAAGCGTTTGAATACGCGCAAGCGCATTTTGAAACAGCTTAAACCAATTACCGCAATCA AAAAAGAAACAGCGAATCCTTTGTTAAAGATTTTAAATGATGAAGAGTCCAGCGGATTTAGAAAAAGATTTAAAA TGTTTGTATGCTATAAAATCAACCCCTGCTCTCAAACTCCCTTCAAAAAACCCAGTTTATCATGCCCAGAG CGAGCGAATTAGAAAGACCTATCTTTTACCTTAATCAACAAGTATTTACCGAGCGCTCAAGCCCAATTGCCCT TAAAAATTTCTAAGATGATGAAGGTTGTTGTGCAATTTGGCGTGAATTTGATCTCCAATAGGATTAGGGTAGT TTAATGCAAGATTTTGAATTTAGTTTAACTAAGGATCGGAGGTTGTGGGCAAGTGTTCGTGGGGGAAG CGGGTA	732	NASSLTIQERLYRHEISRLQVKTDETLK LIKEAKKRLNYNDIRDLVQLGLNIVPD SITINSIEDQQSVVSGKTPSKEAFYFL FQNKLPNMFQYSRAEFFPLSDGWENF VSTNFSNLLIKNPESIK
HP0650	733	GAAAAACAATAATGTTAACGAGAAATTAGCAGGATTTGGGAAAGAAGTAATGACCAATTTGTTAGCGCCTT TTTGGCAAGCTGCAAGATGTTGGCACATTTGCCTAATGCAGGGTTACTTCTAACACTTTGGGGCGGTTGGCGG TATGTGGGAGAGACGATAGCGCCCTAACCAACAGCATCGCTCACTTTGGCACTCAAGAGCAGCAGATACAGCAAG CCGAAACATCGCTGACACTCTAGTGAATTTCAAACTAGATACAGCGAATTAGGCAACACCTATAACAGCATCACCA CCGCGCTCTCCAAAGTCCCTAACCGGCAAGCTTGCAAAACGTGGTGAGCAAAAAAGATAACCCCTATAGCCCTCAA GGCATAGAGACCAATTACTACCTCAATCAAAATCTTACAACCAATCCAAACCATCAACCAAGAACTAGGGCGTAAC CCCTTAGGAAAGTGGCATCGTCAATCTCAACCAACAAATGGTGCCATGAATGGATCGGCTTCAAGTGGGCTA TAAGCAATCTTTGGCCAAAAAAGAAATGGGGCTAGGTATTACGGCTTTTGTGATTACAACCATGCGTTTCATCAA ATCCAAGCTTTTCACTCGCTCTGACGTGTGGAATTTGTTGGAGCGGCGCTTATTAACCTTCATCAACGA TAAAGCCACCAATTTCTAGGCAAAACAAACAGCTTTCTTTGGGCTTTTGGCGGATTCGTTAGCGGGCACTT CATGGCTCAATCTGAGTACGTGAATTTAGCCACCGTGAATAACGCTATAACGCTAAAAATGAATGTGGCGAATTTCC AATCTTATTCAATATGGGAGTGAATTTAGCCAGATCCAAAGAAAGGCGGATCATGCAGCTCAGCAT GGGATTGATTAGGCTTAAATCCCAACCATCAACACGAACTATTATCTTTATGGGGCTGAACCTCAATACAGA AGGCTCTATAGCGGTAT	734	KNNNVNEKLAGFGKEEVMTNFVSF LASCKDGGTLPNAGVTSNTWAGCAY VGETISALTNSIAHFGTQEQQQAENI ADTLVNFKSRYSELGNTYNSITTALSKV PNAQSLQNVSVSKNNPYSPQGIETNY YLNQNSYNQIQTINQELGRNPFKVG VNSQTNNGAMNGIGIQVGYKQFFGQK RKWGARYYGGFFDYNHAFIKSSFFNSA SDVWTYGFGADALYNFINDKATNFKG NNKLSGLFGGIALAGTSWLNSEYVNL ATVNNVYNAKMNVANFQFLFNMGMVRM NLARSKKGGSDHAAQHGLGLKIPTIN TNYSFMSGAEKRYRRLYSVLYNVVFAY

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HP0650	735	AAAAACAATAGAGCCTGGCGTAAACCTATCTTTAAACAACAGCGCTGGCAGCGCTAGAGCGTTATTAAACCTTT TAGATTTGAGCGCTAAATAGAAGATCCTATCACTTTAAACACGCTACAATCCTTACGGCCTCATAGCCTAAATGATG GATCTATAGCGATGATACGATTAACCTTACTAGCGCTTAAACAAATCTTAAAGAGGAGCGGATGAAACGCTT CCATCTATTATCTGGCGCTTGAATGCTGGCGGAAACCCGGAATTTATCGCCAGAAAGGCTGGTATTGTTTGGC AGCGAAGATATTGGTAACGCTAACCCGAACGCCCTTAATTAGCCGCTTCTTGTGTTGTCAGTCAACAAATCGGC TACCTGAAAGCGCGCATCTTTAAGCCAATGCGTGATTATCTGGCTTGTTCGCCCAAGTCTAACACGCGCTTATAGA GCGATCAATCAGGCTTGGATTGCGTTC	736	KQIEPGAITYLLNNSAGDARALLNLS SAKIEDPITLKTQLSLRPHSLNDGSY DTHYNLTSAIKSLRGSDENASIYLS LIAGGENPEFIARRLVIFASEDIGNANS NALNLAASCLFAVKQIGYPEARILSC VIYLACSPKSNNTAYRAINQALDCV
HP0650	737	CTTTATAGATGCGCGTTTGTGGCGAAGCGCTGAAATCGCTAAACAGTATTTGAGCAAGGTTCAAGCGTTTGA TAGAAGGGCGTTTGACTTATGAGAGTTGGATGATCAACGCGGCAAAAAAATCCCGCCACACTATCACAGCGGAC TCGTTGCAATTTATGGATAAAAGTCAGACAATCCCCAAGCAACGCTATGCAAGATAGTATAATGATGAGAAATCC AACACGCTTATCCGCTAATCATAACGCTCCAGCCAGATCCTTTAACCAAGCTTATGCCAAACGCTTACGCT AAAGAGAATTTACAAGCACAGCGCTCAAGTATCAAAACAGCGTGCCTGAAATCAATATTGATGAAGAAATCCC CTTTAAGGGTTAAATTAAGGAGACATTATGAAAGAAACGCTATTCAAAACGCTATTGCAATACACTGAAGCTA AAATCAGCTTTATTGACTATAAAGATTTAGACATGCTCAAGCACACGCTATCAGAGCGCTATAAAATCATGCCAAGGA GATTGACAGGCAATAGCAAAAAGTGGCAAGAAAGGTTGGAAGTAGCGATCAAAAGA	738	FIDARLFGRTAEIANQYLSKGSSVLIEG RLTYESWMDQQTGKKNSRHTITADSLQ FMDKSDNPQANAMQDSIMHENSNA YPANHNAQSDPFNQAYAQNAYAKEN LQAQPSKYQNSVPEINIDEIEIPF
HP0650	739	GACCGTTTATGCTAATGAGCAAGTCAATGATGGGAGGTGTGGCTTGGATACGGAGTTATTCAAAAAGAACTCT ATCAATATTATTTGAAGATCACAAATACGCTGAAGAAATGCTAAAGACTTAGAGGCTTAGAAGATCATTTGGCCTTC TCAAGTCTAATCATGCAAAAAAAGTGGATAGGAAATCTAGCGGTTGCAATTTGGTTTAAATCGCTGATGATG CTTGAAAGCTTGCAATGGCATCAAGAAATGAAGTTTACCACAGAGCGGACCACTTTATGGCGTAACTTACAT CGCTATCGCCAGAACCCCTTTAGTAGAGCATGCCATTAAAGCAAGTGAAGTCAAGAAATTTCAAGATGATTAAAG CGATTTTAAACACGACTCAAGAGAAAGAGCTTTAGAGAAAGGGCGTTTTAGGCATTTACGCTATCCACCTT TAACGAAGCAAAAATCCCTGTTGGTGCTAATTTGCGCCTAGCTAATTTATGTTCTGGGCGTTAATGGGCGTG CCAGCCTGCGATGAAGGAGCTTTGAATTTGCTAATCTGATCATATCCCT	740	TVLANEQVIDGRCWRCDTEVIQELYQ YYLKITNYAEELLKDLEALEDHWPQV LIMQKNWIGKSSGLQFGFKIADECLA CNGIQIEVFTTRADTIYGVTYIAPEH PLVEHAIKQVSQEVSKMIKALNTTQRE RALEKKGAFLGIYAIHFLTQKIPVWVA NFALANYGSGALMGV?ACDERDFEFA NLYHIP
HP0776	741	GTGCATGTTTATGCGCTATACGCATTAATTTGAATTTGGTGTGCTTGTCAATGGCCCATAGAGCTCTCTGGTGTGCGAGA ATGCATTGAAGAAAGCGAAGGGTGGATGGGCGAGTGAGTGAAACCGCTAGTTCTCATTTATGCGTGAAAGCTTTA GCGAAAGGCTCAGA	742	CMFDGYTHYLNVLVNCPIELSGVREC IEESEGVGDGAVSETASSHLCKALAKG S
HP0776	743	ATGGCGGATTGCGTGGCGGAATTTGTGCATAAAAAATTCAGGGATCAGATAGATAATTGGAGGGGTAGCACCGA GTGCGCGTTGATTGAAAAGGCAAGATTAAAGACTTAATCTCGCTTATCTGGACGATTCGCATTAAAGAAATGTT TTAGACAAAGACTTAGAGGTCAATTTGGCTAAAGCCTTTATCCAAAAGAGTCTCTAACTGCCCTTTAAACACAA AAACGCCCTTGGGTGGGCGGACGATCAGAGCGTTGAGTAAGTATTGATGAACGCTTTGTTACCTATTGATT CTTTGCATGGCTATGAATAGATGCACATAAAATTTAGCGTTCAATGAAAATCGTCATGCTCAAGAAAGATCAAT ACGGCTTTAGGGTGAATGAAGAGCGTTTGGATAGCATCAGAGCGGGCGTTGATTTTATCAGTCGTTTGGAG CATTTAAAAACTTCTTTAATGATCACTAGTGGGTGGGTGAGAGAGCGGTGTTTGAAGCATTATTGCGCCA TCATTACCATAAATCCCGCCCAATATCAACCCCTCTCTCATCTTTAAAGATCGCTTTTGGCCCATGAAAAGCAC AGCCAAAAGGTCAAAAAGAAATGCGTGAAATTTGTTGAAGCCTTATCGCCTTGCATAAAATAGATGAAAATACCTT TTCCATTTAAAGATTG	744	GGIACANLLHKNSGITIDIGGGSTECALI EKGKIKDLISLDVGTIRIKEMFLDKLEV KLAKAFIQKEVSKLPFKHKNAFGVGGTI RALSKVLMKRCYPIDSLHGYEIDAHK NLAFIEKIVMLKEDQLRLLGVNEERLDS IRSGALILSVVLEHLKTSLMITSGVGVR EGVFLSDLRLHHYHKFPPNINPSLILK DRFLPHEKHSQKVKKIECVKLFEALSPL HKIDEKYLFLHLKI
HP0776	745	ATTCCTCTTACAAAGCGCAACACATCAATTCGCCCTTGTCCAGAAAGCGATGCTAGCTTAGGGCAAGCGCACATG AAAAGAAAGAGTATGTTTAGCGTCTTTTACTTTGATGAATACATCAAGCGCTTGGGACTAAGGACAATGTGGAT TATTTGACTTTTTAAATGCAATCGCATTAATACGCTTCAAAAACCATCTAAGAGCCAGGAATTTATCTCTAATTC TATTTGAGTTTAGCGGAATTTATAGAAAATACCTAACAGCCGTTACCGCCCTATGTAATAATACATGCAAAATCAA ATTCAATTTAGGGCAAAATGAGCTCAATCGCGCATCGGGAATGCTATAAAAAGCCCAAGCCTGAGGGCGTGA AACGCTATTTAGAAAGGATAGATGAGACTTTAGAAAAGAGAGACTAAACCAACCATCGCATGCTTGGTATGTGT TAATTTTGTGTTAGGATATTTCAAAACCATACACATTATAACAGAGAGATGAAAATGACTGAAGATTTTCTCTAA ATTCGCTTTATTGGTAGAAGAGACACCTTTTATACCCCTTATGATAGCCCTATTTTTCGCAAAATA	746	SSLQSEHINSPLVPEA VIALGQAHM KEYVLASFYFDEYIKRFGTKDNVDYL LKQSHYAFKNHNSKIDQEFISNSIVSI EFIEKYPNSRYRYPVEYMQIKFILGQI LNRAIANVKKRHKPEGVKRYLERID TLEKETPKPSPHMPWYVLFIDW

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HP0776	747	AAAGACAGCAAAAAGACGGTTCGGGTTCTATGATGATCAGCGAGTTCATGAAGCCTATACCGCATTCGCTAAA AAAACAGACCGATACGCTCTATTATTGAGGTATCTCCCTCTAGGTATGGCCAGCATTTTAAACGACTGCCCTTTA TGTCAAATACCCCTGATTTGACGCTTTGAAAAGCTTTTGGTGCTTTATTATACCAACTTGGATTGACGAGGCGAC GATCAGCGCATCAAGCAACCCAGTATCAACATTTATCAAAAACGTTAAAGCAATAAGAGCGTTGAACCATCAAGA GCTTATATTGAATAGCATCGACTCTTATAACACCTTTGATCAATACCTCTATAACTTATGGGATAGCTCTTCTGTTAT CATAGCAATGGGTGCGTCTGCTTAGCCCTAGCTAATTTATTCATGCGAGATGAAGAGAAACCCCATTTTATCGCT ATGGATCCGAAACCCAGTGGAGCATATTTGCCACAAACGCCCAAGAGGCGAGTCAATGGAACGCGGATTTTG ACAAAGAAAAGAGAGAAAGTGGTAAATAATATCGCAATTTAACCTTTTAAAGCGTAAAGAACGCGCATGCTT TAAACGGGATTTTATGATGAAAAAGAAAAATTTATGGAGGCAAGACACGCAAGTGAATGCTGTTATGACATCA CTAAAGAAATTGATAGCAATTATAGGAAGTGAATGAGAAAGTCCCTCCAGAGCGGATACAAATCTTTGTATAACACTA TCACGCGCTGTTTACACATAGAGGGGCAAGAAGA	748	KDSKDCACGFIYSEFMKAYTALLKKY DRYVYLLRYLPSRYWASILTTALYVKY DFDALKKLLVSYYYQTWAGGTITRIKQ TSINIKNVKSNSKSVETIKELILNSIDSYN TFDQYLYNLWDSSSVYHSKWVRPVL LANYFMADEEKPHFIAMDAETQVEHIL PQTPKRGSQWNADFDEKEKEEWVNNI ANLTLLKRKKNAHALNGDFDEKRIY GKDTSKVISCYDITKELYSNYRKWNEK SLQERYKSLYNTITPVLHIEGQE
HP0897	749	CCCTTGAATAATTAGATGAAGCCACAGGAGTGGGATATTACTTGGGATATTACTTGGGATAGCGATGGGAAAT CGCTTTTGAATCCAGAGCCCTTGTGTTTGCACGATATAGATGAAGAATACTTTTAGCGTTCTTTTAA GTGGAGCGTATCAAGAAGTTTAGGATGAACACAAATTTATTCACGACCCCTACGGAATTTAGCGTGGTTTTGAT GAAAAGGCGATTATGAAGTGAAGATATTGTGAAGCCCAACGATTTAGATGTCTAGACGATTTAGACTATGAC ACTAAAGAGATCGAGCGCTTTTAAACCAAAAATTTGAAGACAAACCACTAGACATGGAAGAAAAGAAAGAAATC ATGGGCGCTGTATGTCTATGCTGAGCGAAACGGGTATTTGCCACGATTTCTTAAAGAGTGTCTATAAATGGATT AAACGGCTTTAATCGCTATAAATCAATAAAGAAAAGAAAAGAGATTAAGAAAAGGAGAGCCACCCACTA GGAGTGGGGGGTTTATTCTACATTACCTCCGCTTATTAACCTCCCTGTAACAATATCCCTCTCTCTAATC ACATTACCTCCTCATCATATCCTCATCTCGCATACCAAGACCAAGATTATCGGCTAAACGCGCAGGATTAAG CCGCGACAGCTTAAGCCATATTTATTGATACCAACCATCGCAATTAATTGAGCCACAAACATCGCTCTATTTGTTTT TAGGTAATACTTCGCCCAAAACCATCAGCGAA	750	PLNKLDEKPTRSASLWDITCDSGEIA FDSTKPLFLHDIDIDEEYFLAFLVGA YQEVLMKHNLFTHPTFSWFDEKG DYEVEDICEAQITLDVLDLQYDTKEIE RLKQKIEDNNQDMEEKKEIMGRLYV MLSENGYLRTIS
HP0897	751	TATTAAGAAAGTCTTGAAGCGCAATGGATCTCATTACAGAAAACCAAGAAAGGGAGTTTGGAAAGTTACTGGCA TACCGACTGGCTTTGTCCAAATGGATACTATACGAGCGTTTCAATAAGGGAGTTTAGTCATTATAGGGGCAAGG CCGCTATGGGTAAACTAGTTTGTATGATGAACATGGTCTTAAAGCGGCTCAATGACGATAGGGGGTAGCGGTTTT TAGTTTAGAAATGTCCGAGAGCAACTCGCTTAAAGGGCTTATCGGATCTCACCTCTATTAACATGCTATTTAGA AAGCGGAGGCTTGTATGATGATCAATGGGAAATTTAGCCAAATGCTTGTATCACCTTTGCAAAAACCTCTTTT CTACGATAAAGTTTGTGAGGATAGAGCAATCCGCTTGCAACTACGAAAGCTTAATCCCAACACAGGAATTGG GTATCGCTTTTATTGACTATTGCACTCATGTGAGGAGTAAAGCCACTAAAGAGCGCCATGAGCAATCGCTGAA ATTTCAAGGGAGCTTAAACCTTAGCCAGAGAAATAGAAATCCCTATCATAGCTTAGTGAACCTCAACCGCAGCCTA GAAACCGAGAGCGATAAAGCGGCTTCTTTCGGATATCAAGAGACGCGGGGATGAACAGACGCTG GCCTAACACACCGCCAAAGAGTACACAAATACAGGAAACACAGCTTTTAAATTAATCCATCAATTAGAGCG AAAATCAAAAAGATGCAAAATGATAGAAATTTCTTTAAAGAAAATGGCTAAAGAAATGGAAAAGGGATCAAAAC TTTAAGGATAAAATAGACGCGTTAAATGAACCTTTGCAAAAATCAGTCAAGCTTTTGTATGATAAAGAGATTGTTGT TGGGCGATGATCCCAACATTGAACCGCAACAGCCATGAGAGTGGTTAAATGGAATTAATCTCACTCAAAAT GATAGTTTAGATGATTTTACAAACGAGTTAAAGAGAAAATAGTAAGGTTTGAAGTGTATGCTTAGCGTTGAT TTAAAGATTGAGATTTTAAAGAAAGATACGGAGAACCTCAATAAGCCTATGATGATTTAAGGCAAGATTAGAG CTATTAGGTTTGAATGGACTCAAGGGAGCGTTTATGTTAATTCTTAAAGAAAACACTCTAGCACAAATC	752	KEVLESAMDLITENQRKGSLEVTGIPT GFVQLDNYTSGFNKGSVIGARPSMG KTSMLMNMVLSALNDDRGVAVFSLEM SAEQLALRALSDLTSMHMDLESGLD DDQWENLAKCFDHLQKLFYDKSY VRIEQIRLQLRKLKSKHKLGFIDYDQ LMSGKATKERHEQIAEISRELKTLARE LEIPIALVQLNRSLENRDDKRPILSDIKD SGGIEQDA PNTAKKDYTKYSEKQLFNLIHLERKI KKMQNDRISEKKEKMAKELEKRDQNF DKIDALNELLOKISQAFDOKRDCCLGH EIPNIETQAMRDALNGINLTQIDSLDD FTNELKRENSKGFENVCFVS
HP0895	753	GCCTAACACACCGCCAAAGAGTACACAAATACAGGAAACACAGCTTTTAAATTAATCCATCAATTAGAGCG AAAATCAAAAAGATGCAAAATGATAGAAATTTCTTTAAAGAAAATGGCTAAAGAAATGGAAAAGGGATCAAAAC TTTAAGGATAAAATAGACGCGTTAAATGAACCTTTGCAAAAATCAGTCAAGCTTTTGTATGATAAAGAGATTGTTGT TGGGCGATGATCCCAACATTGAACCGCAACAGCCATGAGAGTGGTTAAATGGAATTAATCTCACTCAAAAT GATAGTTTAGATGATTTTACAAACGAGTTAAAGAGAAAATAGTAAGGTTTGAAGTGTATGCTTAGCGTTGAT TTAAAGATTGAGATTTTAAAGAAAGATACGGAGAACCTCAATAAGCCTATGATGATTTAAGGCAAGATTAGAG CTATTAGGTTTGAATGGACTCAAGGGAGCGTTTATGTTAATTCTTAAAGAAAACACTCTAGCACAAATC	754	PNTAKKDYTKYSEKQLFNLIHLERKI KKMQNDRISEKKEKMAKELEKRDQNF DKIDALNELLOKISQAFDOKRDCCLGH EIPNIETQAMRDALNGINLTQIDSLDD FTNELKRENSKGFENVCFVS

HP0895	755	CGCTGATCCTAGCACCTTCTAAAAGAGAGCGGATAAGGGATTAAAAAGGTGTTCAAAAGACAGCAAAAAGACGCTT GCGGGTTCATCTATGAGATCAGCGAGTTTCATGAAGCCTATACCGCATTGCTAAAAAACAAGACGCGATACGCTCTAT TTATTGAGGTATCTCCCTCTAGGTATTGGCCAGCATTTAAACGACTGCCCTTTATGTCAAATACCTGATTTTGAC GCTTTGAAAAGCTTTGGTGCTTATTATTAACCAACTTGATTGAGGAGCGACGATCAGCGCATCAAGCAAAAC CAGTATCAACATTATCAAAACGTTAAAGCAATAAGAGCGTTGAACCATCAAGAGAGCTTATATTGAATAGCATCGA CTCTTAAACACCTTTGATCAATACCTCTATAACTTATGGATAGCTCTTCTGTTTATCATAGCAATGGTGCGTCCCT GTCTTAGCCCTAGCTAATATTATTTGATGGCAGATGAAGAGAAACCCCATTTATCGCTATGGATGCCGAACCCCAAGTG GAGCATATTTGCCCAACCGCCCAAAAGAGGCGAGTCAATGGAACCGCATGTTTGAACAAGAAAAGAGAAAGATG GGTAAATAATATCGCGAATTTAAACCTTTTAAAGCGTAAAGAAAGCAACGCGCATGCTTAAACGGGATTTGATGAAAA AAGAAAAATTTATGGAGGCAAGACACGAGCAAGTGAATAGCTGTTATGACATCACTAAAGAAATGTATAGCAATTA TAGGAAGTGAATGAGAAAGTCCCTCCAAGAGCGATACAAATCTTTGTATAACACATATCACGCTGTTTACACATAGA GGGCAAGAAGATGATTTGAAGATGATTTGATCTAGATGATTAAGATTGCCAAGCATCAAAACAACAAAGAGGT GATCAATGCCTAAAAAGAGCTATTAAAGATGTCAAGAAAAGGATTTTAAAGACTTCTTAAAGAGCAACCAAGC ACCGCCCTATTGT	756	ADPSTSKRADKGLIKVFKDSKDAC GFIYESEFMKAYTALLKKQDRYVYLLR YLPTRYWASILTAL'VKYPDFDALKKL LVSYYYQTWAGGTITRIKQTSINIKNV KSNKSVETIKELILNSIDSYNTFDQYLYN LWDSSVYHSHKWRPVLALANYFMAD EEKPHFIAMDAETQVEHILPQTPKRG QWNADFDKEKREEWVNNIANLTLLKR KKNALNGDFDEKRIKYGKDTSKVI SCYDITKELYSNYRKWNEKSLQERYKS LYNTITPVLHIEGQEDDFEDDFOLE
HP0895	757	CTCAATCTTAAAAATCTTTCAAAAAGATTTGATAAATGCTTTGAATGGGTTTATGATAGCGTTTGAATGAAGT CATTCTAACCTTAAGAAAAAAGAACCGCTAGATCCACAATTTCAAGATCATGCCCTTAAAGGGAAGTGGAACCTTT TAGGGAATGCCACATTAAGCCTGATGTTTGTGTTGTTAGTAAAGATGATGAACGATTTTGTAAAGGTTAGG CAGTCATAGCGAGCTGTTTAAATCCACCCACACCCCTTATAACGCTTAAACCAATCGCTTGGCTATAATGAACCTGA TATTATATTTTAAAGGAATAA	758	LNLKSFQKDFDKLLI.NGFDDSVLNEVI LTLRKKEPLDPQFQDHALKGKWKPF ECHIKPDVLLVYLVKDEILLLRLGSHS ELF
HP0895	759	AAAATACAGCAAAAACAGCTTTTAAATTAATCCATCAATTAGAGCGAAAAATCAAAAAGATGCAAAATGATAGAATT TCCTTTTAAAGAAAAATGGCTAAAGAATTGAAAAAAGGGATCAAAACTTTAAGGATAAAATAGACGCGTTAAATGAA CTCTTGCAAAAAATCAGTCAAGCTTTTG	760	KYSKKQLFNLHQLEFKIKKMQNDRISF KEKMAKELEKRDQNFKDIDALNELLQ KISQAF
HP0895	761	AGGGATTAAAAAGGTGTTCAAAGACAGCAAAAAGACCGTTGCGGGTTCATCTATGAGATCAGCGAGTTTATGAAA GCCTATACCGCATTTGCTAAAAAACAAGACCGGATACGCTCTATTTATTGAGGTATCTCCCTCTAGGTATTGGCCAGC ATTTTAACGACTGCCCTTTATGTCAATACCTGATTTGACGCTTTGAAAAGCTTTTGGTGCTTATTATTACCAAA CTTGATTGCAGGAGGACGATCAGCGCATCAAGCAACCGATATCAACATTAACAAACGTTAAAGCAATAAG AGCGTTGAAACCATCAAGAGCTTATATTGAATAGCATCGACTCTTATAACACCTTTGATCAATACCTCTATACTTAT GGGATAGCTCTTCTGTTTATCATAGCAATGGTGCGTCTGTTAGCCCTAGCTAATTTTTCATGCGCAGATGAAG AGAAACCCCATTTTATCGCTATGGATGCCGAACCCCAAGTGAGCATATTTGCCCAACCGCCCAAGAGGCGCAGT CAATGGAACCGCGGATTTGACAAAGAAAAGAGAAAGATGGTAAATAATATCGCGAATTTAACCTTTTAAAGCGT AAAAAGAACCGCGCATGCTTTAAACGGGATTTGATGAAAAAAGAAAAATTTATGGAGGCAAGACACGAGCAAAAGT GATTAGCTGTTATGACATCACTAAAGAAATTGTATAGCAATTATAGGAAGTGAATGAGAAAGTCCCTCCAAAGAGCGATA CAATCTTTGTATAACACTATCAGCGCTGTTT	762	GLKKVFKDSKDACGFIYESEFMKAYT ALLKKQDRYVYLLRYLPSRYWASILT LYVKYPDFDALKLLVSYYYQTWAGG TTTRIKQTSINIKNVKSNSVETIKELIN SIDSYNTFDQYLYNLWDSSSVYHSHK VRPVLALANYFMADEI:KPHFIAMDAET QVEHILPQTPKRGSIQVNADFDKEKRE EWNNNIANLTLLKRKKNALNGDFDE KRKIYGGKDTSKVISC'DITKELYSNYR KWNEKSLQERYKSLYNTITPV
HP0653	763	CCGCTTTCGCTCTGCCCATTTATCAACAACCTTAAAAACAACCCACCATAGAAGCCCTAGTATCAGCGCCACCCAGA GAATTAGCCCATGCAAAATTAGCGATGAGATTTTCAAAATTTGGCAACACACACAGGACTAAACCGTGTGCGTGTATGG AGGCCAGAGCGTTAAAAAGCAATGCGAATTCATTAAAGAAAAATCCCCAAGTATGATCGCTACACCGAGGAGGCTGC TCGATCACTTAAAAACGAACGCAT	764	AFALPIINNKKNNHTIEALVITPTRELAM QISDEIFKLGHTRTKTVCVYGGQSVK KQCEFIKKNPQVMIATP'GRLLDHLKNE R

HP0653	765	AATTATGGGACAACCTTAAACCAACACAAAGGAGATACATGTTATCAAAAGACATCAATTAAAGTTGCTAAACGAACAAG TGAATAAGGAAATGAACCTCTTCAACCTGTATATGAGCATGAGTTCTTGGTGCTATACCCATAGCTTAGATGGCGGG GGCTTTTCTTATTGATCATCGGCTGAAGATACGAGCATGCTAAAGCTTATCGTCTTCTTGAATGAACAATG TGCTGTGCAATTGACTAGCATCAGCGCCCTGAGCATAGTTGAAGGTTGACTCAAAATTTCCAAAGCCCTATG AACATGAGCAACACATCAGCGAGTCTATTAACAATATCGTCGATCAGCCATAAAAGGCAAGATCATGCGACTTTCA ATTTCTTGCAATGGTATGTGTCTGAACAGCATGAAGAAAGTGCTTTTCAAGGATATTTGGATAAAATGAGTTGAT TGGTAATGAAACCATGGCTTGATTTGGCTGATCAGTATGTCAAAGGGATCGCTAAAGCAGGAAATCTTAATTTTA GGTATTGGTGCAAAACTAGCGCTTTTGAATTTGACTCCAGCTAGTCAATGCTGAGACGATTGAGTCTTTAGC GAGGCGTGCGGGTTTGTGATGAAGTGAACAAATCACTTTGAAAGCTATGAATGCGGAGACAGATTTTCATAAA GTCCTATTTAAGGGTTTCCAAACTCAAAACATGCCCTTAAACTAGCCAAAGAGTTTGTGAAAGTCTGCCCTTTATT TGAAGGAGCGCTTGAGCTTGTTAGTGCTTAAAGAGAAAT	766	NYGTT	LKNLDEKAIPTPYMKPEPKQDGARTAV HKDGVHLEWVALGYKVPFVKHQQVA LDALSRLLGEGKSSWLQSELVDKKRLA SQAFSHNMQLQDESFLFIAGGNPNV KAEALQKEIVALLEKLKKEITQAEIDK LKINQKAD
HP0653	767	CCTTAAACCTTGATGAAAGCTATCCCACCTTACATGAAGAGCCTAAGCAAGATGGAGCCAGAACGGCA GTCGTGCATAAAGATGGGTCCATTAGAAATGGTGGCCCTTGGGTATAAAGTGCCCTGCTTCAAGCATAAAGATCA AGTCGCCCTTAGACGCACCTAAGTAGGCTTTTAGCGGAAGGCAAAAGCTCGTGGTTGCAAAAGCGAATTAGTGGATAAAA AAGCCTTGCTTCAAGCTTCTCGCACAACTGCAATTAAGATGAAGCGTGTTTTATTCAATGCGGGGGTA ATCCTAATGTCAAGCGGAGCTTACAAAAGAAATCGTAGCGCTTTAGAAAAGCTGAAAAGAGGCGGAAATCACTC AAGCGGAATTAGACAAGCTCAAAATCAATCAAAAGCTGACT	768		VFKDSKKDACGFIYEISEFMKAYTALLK KODRYVYLLRYLPSRYWASILTTALYV KYPDFDALKLLVSYYYQTWAGGTTR IKQTSINIKNVKSNSKSVETIKELILNSIDS YNTFDQYLYNLWDSSSVYHSHKWVRPV LALANYFMADEEKPHFIAMDAETQVEH ILPQTPKRGQWNAADFQKEKREEWVN NIANLTLLKRKNNAHALNGDFDEKRIY GGKDTSKVISCYDITKELYSNYRKWNE KSLQERYKSLYNTITPVLHIEGQED
HP0653	769	AGGTGTTCAAGACAGCAAAAGAGCGCTTGGGGTTTCATCTATGAGATCAGCGAGTTTATGAAAGCCTATACCGCA TTGCTAAACCAAGACCGATAGCTATTTATTGAGGTATCTCCCTCTAGGTATTGGCCAGCATTTTAAACGACT GCCCTTTATGTCAAATACCTGATTTTACGCTTTGAAAAGCTTTGGTGCTTATTATACCAAACCTGGATTGCGAG GAGGCACGATCAGCGCATCAAGCAACCAAGATCAACATTAACAAACCTTAAAGCAATGAAGCGTTGAAACC ATCAAGAGCTTATATTGAATAGCATCGACTCTTAAACCTTTGATCAATACCTCTATACTTATGGGATAGCTCTT CTGTTATCATAGCAATGGTGCTGCTGCTTAGCCCTAGCTAATTTTATGAGGATGAAGAGAAACCCCAT TTATCGCTATGATGCCGAACCAAGTGAGCATATTTGCCACAAACGCCCCAAAGAGGCGAGTCAATGGAACGC GGATTTTGACAAAGAAAGAGAAATGGTAAATAATATCGCGAATTTAACCTTTTAAAGCGTAAAGAAACGC GCATGCTTTAAACGGGATTTTGATGAAGAAAGAAATTTATGGAGCAAGACAGCAAGTGAATGAGTGTGTTA TGACATCACTAAAGAAATTGTATAGCAATTATAGGAAGTGGAATGAGAAAGTCCCTCCAAGAGCGGATACAAATCTTTGTA TAACTATCAGCGCTGTTTACACATAGAGGGGCAAGAGATG	770		KHYTSTGVREPDKCTKSFKKSALMSY DLALGYLVSKNKQYGLKAIEILNAWAKE LQSVDTYQSEDNINFYMPYMNMAWYWF VKKAFPSPEYEDFIKRMQRQYSQSALNT NHGAWGILFDVSSALALDDNALL
HP0411	771	CAAAACACTACACTTCTACCGGGTTAGAGAGCCTGATAAATGCACAAAGAGTTTAAAAAATCCGCTCTCATGCTCT ATGACTTAGCGCTAGGTTATTTGGTGAGTAAGAATAAGCAATACGGCTTAAGGCTATAGAAATTTAAACGCTTGGG CTAAGAGCTTCAAGCGTGGATCTATCAGAGCGAGGATAATATCAATTTTACATGCCCTTATATGAACATGGCTT ATTGGTTTGTCAAAAGCGGTTTCTAGCCAGAAATGAAGATTTTCAATTAAGCGGATGCGCAGTATTCTCAATCAG CTCTTAACACTAACCATGGGCGTGCGGCAATCTTTTGTGATGTGAGTTCTGCGCTAGCGTTAGACGATAATGCCCTT TTGCA	772		FKRQELNEEYLLKNAIKAEILNNAFKKD PSLKDLEKEKELIQTLFNELTQNHQHG NPHA
HP0411	773	TTTTAAGCGTCAAGAAATCTTAAACGAAGAGTATTACCTAAAAATGCCATAAAGCAGAAATTAATAACGCTTTCAAA AAAGACCCCTCCTTAAAGATTTAGAAAAAGAAAAAGAACTTATCATCAACCCCTTTTAAACGAACCTCACAGAAACCC ACCATCAAGGAAATCCGCATGCCATAACCGCTTATTGCAATCAAAACAGACACCCCTAAGCCTCATTGACGATTTA AAAGTCAATTTGACGAGTTTGGTTTAGGGAACGATGGCAACGAATACAAATCATCAGCAATGCTTTTGTATAAA TTCTTATGCGATAAGTTGAATTCCTTTTGAACAAGAAATCCCCAACCAACGATACAAAGATTACAAGACTTTAAACA AGGAAGAAAGAGTCTTTTATACCTTAACCGATAAAGACTCCCCAACTGCCCTATGATGATCTTTTAAACTA TCTTTTGAACAAACATTTAACGATAACGATTTACACCTAAGCTAGATATTTTAACTGATTTTCTAGCAATAATG CCGAGCTTTTCAATACCAAGCAGCAGGACAAACCACTATCGCTTTATTGAAAGCATCTCACAAATACATTAATGAAG AGTCTAAAGGGCTAAT	774		

HP0411	775	CTAATAACCATGTGATTGATGGCGGGATAAGATTAAAGTTACCATCCAGGGAGCAATAAAGATATTCGGCCACTC TAGTAGGCACCGATTCTGAAGCGATTAGCGGTGATTGCGATCACTAAAGACAACTGCCCCACGATCAATCTCT GATTCTAATGATATTTAGTGGCGATTGGTTTTGCGATTGTAACCTTTTGGCGTGGCGGAAAGCGTTACGCA AGGCATTGTTTCAGCGCTCAATAAAGCGGATTGGGATCAACAGCTATGAGAAATTCATTCAACAGACGCTTCCA TCAATCCTGGAAATCCGGCGGCTTAATTGATAGCCGTGGAGGTTAGTGGGATTAATACCGCTATTATCTCT AAACTGGGGCAACCAAGGATTGGCTTGGCATCCCTTCTAACATGTTAAGATACGTAAACCCCAACTCATCAA AACCGTAAGATTGAAGAGGTTACTTGGCGGTGGCTTGAAGATTGAGTGGGATTGCAAAATCTTATGACA ACAAAGAGGGGGTAGTCATTAGCGTAGAAAGACTCTCCGGCTAAAGAGCAGGATTGTTGGTGGGATT GATCACCGAAGTCAATGGGAAAAGGTTAAACACCAAGTAAAGATCAATCGGCTCCATGCTACCCAAATC AAAGAGTAACCTTAAAGTCTATTAGAGACAAAAGACGGCTTACCCCTACCTAGCTGAAAGGAAACCCCTA ACAAAAGAAACCATTTCTGCTCAAAACGGCGCAAGGCCAATTGAACGGCTTCAAGTAGAAGATTTAACTCAA GAAACCAAAAGGCTATGCGTTTGGCGATGATGTTCAAGGGTTTTAGTCTCTCAAGTGAATGAAATTTCCCGAGC AGAGCAAGCCGATTAGGCAAGGTAAACATTATCACAAAAATTGAAGAGGTTAAAGCGTTGCGGATTTTA ACCATGCTTTAGAAAAGTATAA	776	NNHVIDGADKIKVTIPGSNKKEYSATLVG TDSSEDLAVIRITKDNLPITIKFSDSNDIS VGDLVFAIGNPFGVGESVTQGIVSALN KSGIGINSYENFIQTDAISINFNGSGGALI DSRGGVLGINTAIISKTGGNHGIGFAIP SNMVKDTVTLIKTGKIERGYLGVGLQ DLSGDLQNSYDNKEGAVVISVEKOSPA KKAGILWDLITEVNGKKVKNNTNELRN LIGSMLPNQRVTLKVRDKKERAFITLTL AERKNPNKKEITISAQNGAAGQQLNGLQ VEDLTQETKRSMRLSDDVCGVLVSQV NENSPAEGAGFRQGNITKI:EEVEVKS ADFNHALEKYGKPKRFLVLDLNQGY RIILVK
HP0411	777	GGGAGCAACCTTAAAGCTAATGACTGGAAAGTGAAATCAATCCGTGGTAAACCCATTAAAGGCGGATAACACT TTCATTCTCAGCCCCACTTAAAGGTAAGGCTTTAGAAAAGCTATCGTTAGGTGCGAGTTTATGATGCGCTGAAATG CCCGCATGCCAGCATGAAAGAAATGGCGCAAGTGAGTGAAA	778	EQTLKANDLEVKIKSVGNPIK:GDNFIL SPTLKGKALEKAIVRVQFM/PEMPGM PAMKEMAQVSE
HP0411	779	AAGAAAACCTAAACCTAAACCAAGCCCAACCCATTACCCCTCAAGCACCTATGGAAATACATCATCTCCCAA GCACCGTTTTAAAGATGCGACTGAGTTGTTGCAGAGGACAAATACCAACTTAACCTTTTATCTTTAACCCCTG TGATGTAAACCGCTTACAACCAAGAAAGCGCTGAAGAGCAGGCTATGGCGATAGCAGCTTAATATGATACAAAC TTCITGCGCTTATAATTTAAACAATATTGAGCTGAGTTATACAGACAATCAAGGCAATGATGAGTTGGCGGTGATA GAGACTATCCCTAAACAATCTCAATCTGCGCGCAAGCTTGTAAACGATCCGAGCTTAACGCTGATGGCTTC CAACAGCTCCAACTGCCACACAGATTTCTGATGCCAGCAGCAATCTGTTGATAAGCTCAGTAAGGTTAC AACCAATCTTCAATGACTTATATCAATTAACAACCAATTTCTAGCGGTAATGGCAGTGGTTCTAAACCCCGCATGCC TCCATACGAAAACCAAGAAACTGCACGGCTAAAGTGCCGCTTTCACCTCTCAAGAGCCCAAGAAATTTGACCAATT TAAT	780	EKPYPKPKPITPQSTYGYISQSTV LKNATELFAEDNITNLTIFYSLTPVYVTA YNQESAEEAGYGDSSIMIQNFLPYNL NNIELSYTDNQNVVSLGVIETIPKQSQ IILPASLNDPQLNADGFFQQLQTATRF SDASTONLFDKLSKVTNLTQMTYINYN QFSSNGSGSKPPCPYPYENQENCTAK VPPFTSQDAKNLTNL
HP0411	781	CGATAAATCGCGCTTTTGATGGCAAAACGGAGTTTTGGCGAAAGATTGCGTGGAAATAACGGGATTTGCGCGA GTCAATTCACGGATTATCAAGGCATTGTGGGGATAGCAGCGATAATTACAAGGGGTAAAGGCATTGGGAGCAA GAACGCTAAGGAATTGTGAGCGATTAGGGAGCTTGGAAAAATCTATGAAAATTTAGACTTGGCGAAAAATTTACT CAGCCCTAAATGTATCGAGCCCTGATACACGACAAAGCAAGCGGTTTTTAAGCAAGAAATTAGCCACTTTAGAAA GAGGATGCATTAAAGAAATTTGATTTTTTAAGTTGCGCTTTTCTAGCGAAACCCCTTATTGAAAATTAAGATGAAT GAAGAATATGTTTCAATTTCTACTTTAAGGATTAGAGAAATCCCTACGCTTAAATTTTAGACAACGCCCTTGA TTAGACAACACGCCCTTAGACAACACCCCTAAATAATCATGATGATGTTTTGGAAGCGCGCACCTTTGAG CGCGTTTTTAGAAAAACTAGAAAAAACTAACGCAAGGTTTTGCGGTTTGTGCTGATAAGAAAAAAAGTTCT GGCCCTAGCGTTTTATATGAAGATCAAGGCTATTTTTACCTTTAGAGAGGCGTTATTTGCGCCCTTTCTTTAGAG TTTTTGCAAAACGCTTTTTTAAATGTTACAGCATCGCAATCATTTGAGCATGATTTAAACCCCTTTGTTGAGCTTTT TAAAGCCCAATACCAAGTGCTTTTAGAAAACATTCGCATCCAGACACTCAATTTTAGCGTTTTTAAATAATCCGG AAAAAGTGGGTTGATGAAGTTTTTAAAGGAATATTAAAGAAAGAAATGATCCGCATGAAAAATCAAGATTTTAA GACTAAAGCGGAGAAATTTGAACCTTTTAAAGCGTGAATTAACGCTTTTAAAGCGTTTGTGTAATATTTGAAAAAGG GGGATTGGAA	782	DKIALFDGKTEFLAKDCVEKYGILPSQF TDYQGIVGDSNDNYKGVKGIGSKNAKE LLQRLGSLEKIYENLDLAKNLLSPKMYR ALHDKASAFLSKELATLERGCIKEFD LSCAFFSENPLLIKIKDELKEYGFIETLR DLENSPTPLILDNAPLNDNTPLDNTPK KSCMIVLESAAPLSAFLEKLEKTNARVF ARLVLDKEKKVLALAFLEYEDCGYFLPL EEALFSPFSLEFLQNAFFKMLQHAQIIG HDLKPLLSFLKAKYQVPLENIRIQDTQIL AFLKNPEKVGFEVLKEYLKEELIPHEK IKDFKTKAEKLELLSVELNALKRLCEYF EKGGLEENLLSLAREIETPFM/KVLMGM EFQGFKIDAPYFKRLEQEFKNELHVLE RQILELIGVDFNLNSPK

HP0887	783	GGTATGGCAAGCAAGCTTGAGTTCCTTTGGCCAATAATTTGTGCCTGGAGGCTTGAATCAAGCCCTTGATAAAATAG GCTCTAGCTCTGATGCCAAGACTTACAGAACTTCTTGATAAAACGACTTTTGGGATATTTTAAATCAAATGATTG AACAAGCCCTTAATCAATAAATCAATCTTCTGGCTGGTCCGAGGATTTGAGCGTTTGTAGTGAATATCGCTTTAA ATAGCATCACTAACCTTAGTAAGAGCTGACTAGCACCAATTTCTAGCATAGGTGAAAAAGCGTTAAATGACTTATTAG GCGATGGCTAGTGAATAAAATCATGAGCAATCAAGTCTTAGGGCAATGATCAATAAAATCATTTGCTGATAAGGGC TTTGGAGGCGTTTATCAGCAAGGTTTAGGCTCCATACTGCCTCAATCTTTACAAGATGAATTGAAGAAATGGGCATG G	784	YGKQSLSSFANNFVPGGLNQALDKIGS SSDAKDLQNFLDKTTFFGDILNQMIEQA PLINKLISWLGPQDLSVLVNIALNSITNP SKELTSTISSIGEKAALNDLLGDGVVNI MSNQVLGQMINKIADKGFGGVYQQGL GSILPQSLQDELKKLGM
HP0887	785	CCGGGAATATCACCGTTGATGGGCTTTAAGAGTGAATAATCAAGTGGGTGTTATGCTTTGGCAGGATCAAGCGC GAATTTTGAGTTTAAGGCTGTACGGATACCAAAAACGGCACAGCCACTTTTAATAACGATATTAGTTGGGAAGATT TGTGAATTTAAAGTGGATGCTCATACAGCTAAATTTTAAAGGTATTGATACTGGTAATGGTGGTTTCAACACCTTAGAT TTTAGTGGCGTTACAGGTAAGGTCAATATCAACAAGCTCATT	786	GNITVDGPLRVNNQVGGYALAGSSAN FEFKAGTDTKNGTATFNNDISLGRFVN LKVDAHTANFKGIDTGNNGGFNTLDFSG VTGKVNINKLI
HP0887	787	GCAATGGCGGAGTGGTACAGGCGAGTGGGAATGGCACAGTCAAATCAACACAGCCTACCAGATGCTCACAGACG CCAGCGATGGGAAATTAGGACTTATAGTAGTAGTGCGAGTAATAACGGCTATACGCCATGCAATAGCACCAAT GGAGCAATAAAACGAGTGGGAACAATTGTTATGAACCCCAACAAACGCAACGCAACCGCCACAA CCGACAGCAATTTACAAAAGTCTATAATGACGCCCAAAAAATAGCCAACATTATCGCCAGCTCTGGGAACAATAAAG GCGTTGAAAACGGCTTAAAAACAATCTTTGAAGCGTTTAAAGGCTTATCAACCTTTTAGGGCAATCCCAACCAATGGAGTG GTAGTAGCGGTAGTAGTGGCACTACTTGTCTCCGTTGCTTATCAACCTTTTAGGGCAATCCCAACCAATGGAGTG AGCGATACGAATAATTAATTAATCTGCTCACTGAATTCATTAAACCGCGGTTTATCCAAAATAATGATAGTAGTG TATCTACTAGTCTTACAAGCGCTTTCAAGCCATTACGAGCGCTATTCTCAAGGTTTCAAGCCTTACAAAACGATA TTAGCCCTAATGCGATTTAACCTTGCTCCAAGAGATTACTTCAACACCAACCACTTCACTCATCTCGCAACCTT ACGGCAGCTTTTAGGGGATAAAACATTTCTTATGGCGCAACAAAGCTCATTGATGCGATGATTAAACGCCAGAAATC AGGTTCAAAACGCGCAAAATCAAGCCCAATACTACGGCTCTCAACCCGTTTAAAGCCAGTATGCGGCCGCTAAAGC ACCCAACATGGCATGAGCAATGGTTAGGGGTGGTTGGGCTATAA	788	NGASGTGSGNGTSQINTAYQMLTDAS DGKLGTYSSSSGSNNGYTPCNSTNGS INKTSGNNCYEPNKKQKNATTATATDS NLQVYNDAQKIANIIASSGNNKGVEN GLKQFFEALKNSSSLSNLCGNGSSG SSGTTCSGWLINLLGAIPTNGVSDTN LINLLTEFIKTAGFIQNNDSVSTLSA FQAITSAISQGFQALQNDISPNAITLLQ EITSNTTTIQSFQTLRQLLGDKTFMA QQKLIDAMINARNQVQNAQNQANNYG SQPVLSQLYAAAKSTQHGMNGLGVGL GY
HP0887	789	GCAATACGACTTTAAGCGGATGTTTACTCCCTTGATCATGCAAGCGCAGTTGAGCTTAAGAAACATTGATAATTTGT GGAAAAGGCTCTGCTTTGATAGATAAATTTGACGCTAACCCCTATAAAACGATTTTGGAGAAAGGAAATAATCATG AGAGCTACGGCGATAAAATCTTTTCACTCTCATCAGCATTAGCCCTATTGCTTATGTTGCTTGAGCATCAATTTA AAACAAATGCTACAGAGATCAGAACTTACGATTTGAATGCGAGTTCCTTTTGAATCACGCAATGCGCTAAACCTTTG ACTGAAGTGAGGCTCATTAGTATTTGAGCGCGGATTTATTCACACATAAGAGATCGTTTTTAAAGCCAAAGACGGG CAGATCACGCTGGGAAGCACCAAAATGGATAGACTTGCCTCGAACATGCTAAAAACCATTGTTTCATGCAAGAAAGC GCAAAAGCATGCTTAGGCGTGGCTTTGCTCTTATGGCGGGGTGACCCAGTTATGCGGTTCTGTTTTACGATTT TATCGTTTTCTCTTTAGAAAAAGAAAAATCTACCTATAGGGCGGAATTTGCACTAGGCTATGACATTAGCGGTGAAAG GCGATTGCGATTCT	790	QYDFKAMFTPLMQAQLSLRNDNFVE KGSALIDKFDANPYKTFGERK
HP1198	791	CAATGCGATTGAGCAAGATGAAATCACTAAAAAAATTGAAGCAGAGAGTTGTTAGAGCATGTCCAAAAGCGCTGA ATCAAAATGAGCGAAAGAGAGCAAAATCCTTATCCAGCTTATTAATCTTTGAAGAGTTGAATTTGAGCGAGATTAAAGAGA TTTTAGGCATTACTGAATCGCGCATTTCTCAATCATTAAGAAGTGATTAAAGGTGCGTAAATCCTTAGGAGTGG ATCATGGCTGATATTTTAAAGCCAAAGAAATTGATGCGCTTTTAGAAGTCTGTTGATGAAATGTGGATATTCAAAAT GTCCAAAAAAAGATATTATCCGCGAGCGCAGCGTAAACCTCTATGATTTCAAAACGCCCTAATCGTGTGAGTAAGGA GCAACTGCGCTCTTTTAGGAGTATCCATGACAAAAATGGCTAGGAATCTTTCTAGTCAAGTC	792	NAIEODEITKIEAEELLEHVKALNQM SEREQILQLYFEEELNLSEIKELGITES RISQIIEVIKKVRKSLGVHDG

HP1198	793	GGTTGATGAAAAAGGGTCATTGATTTAGGGGAGGTGGAGCAGGATAATGGCGTGTTTGAAGCAGTGGGGGG AGGGTGATCTTTGCCATTGGTAGGGGAAATCCTTATTAGAAGCCAGAAACCATGCTTATGAAATCGCTCAAAAGGT GCATTTGAAGGCATGTTTATCGCAAGGATATTGGTTTAAGGTGTAGATTGAAAGAATATCTTAAAGGTTAAAG TTTAAGACAAACCAAGAGTTTGTCTTGTGTTTGAATGCACCTCTCAAATTTAGAAAAAGAAACCCGAAATCA TAGAAACACTCCTTATGCGTGAAAAATGCGTTTATGCCCTTGTATTGGCGCATCTTAGCGTTTAAACCGATGTT TGTTAGTGGCGTTTATTAGCGGATCTTTAGACGCATGCGATTCTTGCAATCTTATATGGCTAGCTAACCCCTAT TTATCACAGCGCATTTGTGCGATGGTTTATCATCTTGATGCGTTTATGAAATCTTTTGTGTGTGCAAG ATGAGCTTGGCTAACTGGTTTATAGGATTAAGATTATGATATTATTTGGCAGATTGCCCGTAGGCTATTTTAT TGAAGCGTTAGGGTTAAGATCGTGGTTTCTATGCCCTTTTATGGTTTGGCTTAAAAACCCCTATCATAG GGCGTGCGATGAAGAAAAAGCAAAAGCTTTTGGTATTGTTTAA	794	VDEKKGHLILGEVEQDNGVFESSGGR VIFAIGRGKSLLEARNHAYEIAQKVHFE GMFYRKDIGFKVLDLKEYS
HP1065	795	AACGCTTTTAAAAACCTCATTAGAAGAAGCGCTAAACCCACTTTTATTTACCCCTAACTCTAAAGCCGTTCTGTGATTA GGGCGAGGCATGGGATTTTAAATCGTTTAAACGCTTATAGCACCTCAGCCAACTCACCCTCAATGCGCTTAT GATAAGAAATCGCTTCCAATCTCGCTGATGTGATTGTGAGCGATG	796	NAFKNLIRRSAKTTFIYPINSKAVRVIRG RHGDFLNRFKTLYSTSANLTQCAVDKE IASNLADVIVSD
HP1198	797	GACATTTAACCGATAGTAAGGGCGTGAGGGTGATTTCAAAAAACACGATTTTGATCTTAACCCAGCAATGTGGCTAGT GGTGCGCTTTTGGAAAGAAATTTGAGTGAAGCCGAGAGCAAAAGCGATTAAAGAGAGCTTGAGGCAATCTTTAA GCCGGAATTTTAAACCGCTTAGATGAATCATCTCTTAAACGCCCTAGATAGTCTGCTGCTTAAATATCGTGGG GATACTTTTGAACAACATCAAAAAAGCGCTTGAAGGGGCATTAAATACCCCTAGACGAGGCAAAAGAAAT GATCGCCGAAGCGGATTTGACAGATTCTATGGCGCTAGACCCCTAAAGCGCGCTCTATGAAATGGTAGAAGAC AAGCTCGCTGAACCTATTTAGAGGATAAAGTTAAGAGAAATGACAGCGTGCGATTGTGGTAGAAATAACGAGATT GTGCTAAGATTAAAGTGAAGTTTGTATCTCTAAAGACAAAGAAATGGTTATTTTGAAGAAAGGATTGAATGATGT TGATAACACGCTTGTAAATCTCTTGACACAGCGCCTCTTTAACTTCTAGCCGGGATTTTAACTTTTAAAGC CCTTGGCTGTTGCCCTTAAATCCCGCGCTATATGTCTTATATTTCTCAAAATTTCTTAGAGGATATTAAGATGGTAAGG CTAAAGGGTTTCGGTTTAAATCTTTGATGTTTGGTGGGTTTTCGCTCGTGTGTTTGGCGGTGGCGATGT CTATGGCCCAAGCTTATCCATAGCTTTTCGTTTCTGGGGAATATATCGCTGGGGGATGTGATCCCTTTTGGTT TGCAATTTTAGCGGTGTTTCGTTTGCATTTTATATAAACCCCAAGCGTTGGTTAGCGAGCAATCTAATAGCAT GCAGCGCTTTTACCCCTTTCTTTGGCGATGAGTTTCGCTTAGGTTGGACGCCATGTATCGGGCCGAT	798	HLTDSKGVVRVDFKNTILITSNVSGAL LEENLSEAEKQKAIKESLRQFFKPEFLN RLDEISFNALDASHAVINIVGILFENIQKK ALERGINITLDEEAKELIAEAGDFRFG ARPLKRALYEMVEDKLAELILEDKVKE NDSVAFWENNEIVPKIK
HP1198	799	AAAGCTTTAAATCCATGAATAAGTGAATAAGAAATAAAAGGTAGAAAAAAGAGCTTTCACGCAATTTTGATCG CTAATAGAGCGGAGATCGCTTTAAGAGCGATCCAAACCATTCAGAAATGGTAAAGATCCATAGCCATTTATTCTA TCGCTGACAAGGACGCCCACTACCTCAATACGGCTAGCGCAAAAGTGTGTATAGGGGGGCCAAATCCAGCGAGA GCTACTTGAATATCCCTGCGATCATTAGCGCGCGGAATGTTTGAAGCGGATGCGATTTCGCCGGTATGGGTTT TTGAGCGAGAAATCAGAAATTTGAGAGATTGCTCGCACCATTTCTTAGAATTTATGGTCCAGCGCGAAGGTCATG GCITTAATGAGCGATAAATCCAAAGCCCAAGCGTGATGAAGGAAGCCGGCATGCCGTGATGAGGGCAGTGATG GGTTGCTTAAAGCTATCAAGAAGCTGAAGAAATCGCTGATAAATCGGCTACCCCTGTCATCATTAAAGCAGCCGCT GGTGGGGCGGAGAGGCATGCGTGTCTGAGGAGATAAATCCAAAGCTTAAACCTTTATTTAGCCGAGAAACGG AAGCTTTGAGCGCGTTTGGCGATGGGAGCGGTATTAGAAAAGTTTCATCAACAGCCCAAGCACATTGAAGTCCAA ATTCTAGCCGATAAGCATGGCAATGTCATTGATGTGGCGGAAGGGATTGCTCGGTGCAAAAGACGCCAACAAAGC TCATTGAAGAAACCCCGCAGTGGTTTGAAGAGAGGCGTGCGTGAGCGTTTGTAGAAAACAGCGATCAAGGCCGC TAAATATATCGGCTATGTGGGCGGGGACCTTTTGAATTTTGTGGATTCTAACATGAAGATTTTATTTCATGGA GATGAACACTCGTTTGCAAGTGGAACAC	800 KL	

HP1198	801	AATAAAACCCCATTAATGCGGATGTGGAGCTTAGATGATGTTCAATCAAAAGCGAATTGCAAGCGTGGTTGCA ACGCATTTTAAAGCCTATCTAGTCTCGTTCGTGTCGCCCAAACTTGATGGGTTTCGCTCAATCTTTTGTA TCAACATGGCAAGCTAGTGAAGCGCACCTAGGGCAACGGCTTAGAAGGAGAAATTAGTTAGCGCAACGCTAAA CACATCGCTAATATCCCCACGCTATCGCTTATATGAGAGAAATAGAAATCAGGGCGGAAAGTGATCATTTCTAAAAG GATTTTGACGCTTTGAATCAAGAGCGCTTAAACGCTAATGAACCCCTATTGCTAACCCAGAAACGCGCATCAGG GAGTTGAGGCAACTTGATAGCGAATCACTAAAAGCGTAAATTGCAATTCATTCTTGGGCGTGGCAAGCATT CTTAAATTTTAAAGCTTTAAGGAGTGTGGATTTTATCGTCTGTTAGGTTTAGCGCCATTCAATACTTAAGCCTA AACAAAACCAACCAAGAAATAGAGACAATACACACCTAATTAGAGAAAGGAGGGCTTTTTCGCCCTTTTAGAC GGCATGGTGATCGTTGTGAATGAATTAATATTAATAATTCAAAAGGAGCTAGGCTACACGCAAAATCCCTAAATTCGCTTG GCTTATAAATCCCGGCTTTAGAAAACACACCAAAATTTGAGGAGTCAATTAACCAAGTGGGCGCAGCGGGCGAT CACACCGTCTCTTTTAGAGCCTGTGGAAATGCTGGAGCTATGATTAATAGAGCGACCTACACAATATTCTGA AATTGAAAAAAGAATATCATGCTCAGTGATAGGTCGTTGTCATTAGAAGCGGCGATGATCCCTAAATCATCAA GCCITTAGAATCTTATAGAGACGGCTCGCAACATAAAATTGAACGCCCCAAGGTTGCCCTATATGTTCCGATGAGC TTTTGTGCGAAGAGA	802	NKNPHLMRMWLSDDVFNQSELAWL QRILKAYPSASFVCSFKLDGVSLNLLY QHGLVKATTRNGNGLEGELVSAKHI ANIPHAAYNGEIEIRGEVVISKKDFDALN QERLNANEPFLFANPRNAASGSLRQLD SEITKKRKLQFIPWGVGKHSNLFSLFKE CLDFIVSLGFSAIQYLSLNKNHQEIEDN YHTLIREREGFFALLDGMVIVVNELNIQ KELGYTQKSPKFACAYKFPALKEHTKI VGVINQVGRSGAITPVALLEPVEIAGAM INRATLHNYSEIEKKNIMLSDRVVIRS GDVIPKIIKPLESYRDGSHKIERPKVC PICSHELLCEEIFTYCQNLCNCPARLKE LIHFASKDALNI
HP1198	803	TGCCGGGTAGAAATCAAGGGTTATGGACTGAAAGGAAAAAGACGGCTTAAATCCCAATGGGGATCAAAAAG GGCGACACCTTTGATGAGCAAAAATTAGAGCATGCTAAACGGCTTAAACCGCTTAGAGGGGCGAGGCTATTA TGGAGCGTGGTGGAGTGGCAGAGAAAGGTGAGGGTGCTATTGATCGTGTGTTGATGTAATAGGGG GGATAGCATTTATATCAACAATCCATTATGAGGGAAGCGGAAATTAACCGCGCATGATTGAATCTTTGAGTGC GAACAAGCAACGAGATTTATGCGGTGGATGTTGGGCTTGAATGACGGGAAATGCGTTTAGATCAACTAGAAATACG ATTCTATGCGTATCCAAGATGTATATGCGTAGGGTTACTTAGACGCTCATATTTCTTCGCCCTTTTGAACACGG ATTTTCTACCCATGACGCTAAGCTTCAATTATAAGTCAAAAGGAGGATCCAATACAGGATTTAGACATTTTAATAGA GATTGACAAACCGGTAGTCCCTTAAACCTTAGAAAAGCGCTTAAAGTGAAGGAAAGATGCTTTAATATTGA GCATTTAAGAGCGGATCGCAAAATTTTAAACCGAAATCGCGATAAGGGTTATGCGTTTGGGTTGGAAGCCAG ACTTGATAAAGATGAATAAACGGGCTTGTGAAGTCAATTTATCGTATTGAAGTGGCGATATGTTGATATATCAATG ATGTCATCATTTAGGGAAACCGCACGCGATAGGATCATTAGAAGGGAGTTATTGTTAGGGCTAAGGATAAA TACAACTTGACCAAACTGAGAAATTCGAAATTTCTTAAGCGGTTTAGGATTTCTCTAAAGTCAAAATGAAGAAA AAAGGG	804	AGVEIKGYGTEKEKDKGLKSQMGIKKGD TFDEQKLEHAKTALKTALEGQGYGGSV VEVRTEKVSSEGALLVFDVNRGDSIYIK QSIYEGSAKLRMRMIESLSANKQRDFM GWMWGLNDGKRLDQLEYDSMRIQD VYMRRGYLDHAISSPFLKTDFSTHDAK LHYKVKEGIQYRISDILIEIDNPVPLKTL EKALKVKRKDVFNIEHLRADAQILKTEI ADKGYAFVAVKPDLDKDEKNGLVKVIY RIEVGDMVYINDVIISGNQRTSDRIIRRE LLLGPDKYNLTKLNRNSENLSRLRGFF SKVKIEEKR
HP1198	805	CAAAGAGCTGCAAAAAACAAAACACGAGTAACACCATGATTAACACGATGTTTGGCGACCATGCAAAAGGG AGTGGCGGAAATCGTGGCTGTGGAAGCGACTTTCACAAGGGCTTTCGGCGTGTGATTTGAGGTTAGCTAAT AGCTCTATCCAAGAACCAACAGCGGTTCAATCGGCTTACAAATAACGATTTTACCTTCCCGCTTTAAATAATC ACCATCAACCTTTCCCGCTCAGATTGCTTAATCCGGAGTCAATTTGATTGCTTATCGCTCTTTAATCGCTTTGC AAAACAAGAGTTGGCTTTTAAAGAGTGGTTTGGGAGTTAGGGCTTGAAGCAAGATCAAAACCCCAATCCT AACATTTTCCCATGCTTTTAGACATTGCCATTAAACACCCCATGCTAAGATCATTCGCGCTAAGGCCAATGAAGAG CTTTTTCGCTTATCCCTAATTTGCAATGCTTTTGTGGGCAATTTAAAGAGCGTTAGAAATCTTGCAAAACCCCTG AAACCAAGCAGACACCCACGAAACAACTACCCCTTAAACGATAGAAATGAACGATAAGAGTATTATTITTCAG ACGCTATGCCCTAGATTTAAGAGTTAAGGGCAAGCTGTCGCTAAAGAGCGCGCTTTGATCGCTAGCGCTGG GTTTCATAACTTGATTTAGAGGGAAGTCCAGGTTGGGAAAGCATGATCAATTAATCGCATGCGTTATATCTTGC TCCATTAGCCTGAATGAATCCTAGAGCGCAAAATTAACGATTTTAAAGGAGCAAGACAGTGCCTATTACCCCTT AAGGAGTTTGAACCCCTCACCAAGCGCTTCAAAATCCAGTATTTTAGGCTCAAGCTCTCTAAGAGAGCCAAACCC TGGCGAAATCGCGCTAGCGCATACGGCATGCTTTTGTGATGAATGCTCTATTTTAAAGGATATTTTGGAAAGC TTTAAGAGAGCGCTT	806	KELQKKQKHE

HP1198	807	TTTAAAGCGCCCATCATTTCAAAAACAAGAGCGTGCTTTTAGCTGCTGATTTCCATAACCCAGAGCTAAAAGAACAAATG CATGGATAAACTAACGCTTATGAAAAGCAAAAAGACCGACAAAAGAGACTAATTAATCTCGTCAATTAGAAGCGTT TGAAAAGAAATACGCGCAATATAAACCATACATATCCCTTACTTACCAAGAATGCGTTAAAATGCGCCCATTT AGCCAACAAGGAAGACTATGCCAAAAGAGTGCATGAAAATTTGACGACCTTATTCTAGCTCTAAAGAAATGAG CGTTCAATCGGCTATTTCTTTTGCAATTAATAAGTTGATGCTAAATTAAGAAAAGCCGCTCTTATGAATGGCGTTTAT ATAAGCCCTTATAAAAATCCACCCATTGCCAAAGAACGCTTTGGAAAATAAGAGCTTGAAGAAATCGCTTTAAAT ATGAACCCCTAAATTAGAAAAGCAAGCCCTTTTATTGATGGGATAAAATGGCTATGCAATCTGCGGGTTATTGAGA AAGAATAAAGGTGCTTGATTGCTTTTGCTACAGATAATTGATGGAGCGTAACGAACATAAAAAAGA GATGGGGTGAAGCAGCAGACTATTGAAGCTTTAGAGCATGCAAGGCCGCTAATGTGCTGTGATTTTTCGATGAA TAAATGGATAAGCCTAATGTGAATCCGGACAACTCAAGCCGAATGCGCTGAGCTTGCTATACCCCTGTGGATT GGGCGGGGAGCATGAGTTTATCCCTGTTTACGCTAAACCGGGGATGGCATTGACAATTTATTAGAAACCATCTC ATTCAAGCGGGTATTATGGAATTAAGGCC	808	LTPIIQKQERRFSCSDFHNPHELKEQCM DKTNAYEKQDRQKRLNLVQLEAFEK EYAQYKPYIPTYFTKECVKNAPHLANKE RLCQKEVHEKFDDPYSSSKELSVQSAI SFCIKKVDAKLEKAALMNGVYISPYKKS THCQRTHLENKSLKEIALNMNPKLEKQ SPFIDADKMAMQSAAGLLRKIKUKGVLIAF ATDICMERNEHKK DGVKQQTIEALEHAKAANVFVIFAMNK MDKPNVNPDKLKAECALGYNPVDW GGEHEFIPVSAKTGDGIDNLLLETILIA GIMELKA
HP1198	809	TGAAAGAGAGCAAAACCTTAAACCAAGCTCTTAGCCGAAATGGATGGTTTGGAGCGAAATGCGCTGTAATTGTCT TAGCCGCAACGACCGCCCGAAATCTTAGATCCGGCTTAATGCGTCCAGGGCGCTTGACAGCGCAGGTTTGTAGT GGATAAGCCTGATTTAATGTTAGGTAGAAATCTTAAAGTGCAATTAAGGCGTGAACTTGCTAATGATGTGAA TTTGCAAGAGTCCCAAACTCAGTGCAGGGCTTGCAAGAGCGGATTTGGCAATATTATCAATGAAGCCGCACTTT TAGCAGGAAGAAACAACCAAAAAGAGTCAAGGCAACATTTAAAGAGCGGTTGAAAGAGGGATTGCAGGGTT AGAAAAGAAAGCAGCGGCATCAGTCTAAAGAAAGAAATCGTCCCTACCATGAAGCGGGCATGCCGTGATT TCTGAATGACTAAAGGGAGTGTAGGTGAATAAGTCTCTATCATTTCAAGGGCATGGCGCTTGGGCTACAC CCTTAACACGCTGAAGAAACAATACTTGATGCAAAAGCAGCACTCATCGTGAAATGATGTCTTTTAGCGG GGAGAGCGCTGAAGATGCTTTTGGAGAAATTTCTACGGTGCAGCAACGATTTAGAAAAGGGCGACTGATATT ATTAAGGCATGTGAGTTACTACGGCATGAGTAGTGTAGTGGCTTATGTTATTAGAAAACAACGGAACGCCCTT TTTAGGAGCGGTTATGGAAGCAGTAGGAAATTTAGCGAAAAGACCGCAGAGAAATGGATCTTTTCATTAAAAACC TGTTAGAAGAACGCTATAAGCATGTCAACAACCTTAAGCGACTATAGAGAAGCG	810	EREQTLNQLLAEMDGFSGSENAFVILA ATNRPEILDPALMRPGRFDRQVLVDKP DFNGRVEILKVHIKGVKLANJVNLEEV AKLTAGLAGADLANINEAALLAGRNNQ KEVRQQHLKEAVERGIAGLEKKSRRIS PKEKKIVAYHESGHAVISEMTKGSARV NKVSIIPRGMAALGYTLNTPREENKYL QKHELAEIDVLLGGRAAEDVFLEEIST GASNDLERATDIKGMVSYGMSSVSG LMVLEKQRNAFLGGYGSREFSEKT AEEMDLFIKNLLEERYKHVKQTLSDYR EA
HP1198	811	CGCACAACACATTCAGAAAACGGCAAGAGCCTGATTTAGAAGTGGTGGCTGAAGAGTGGGCTTCGTTAGAT AAAGTGAAGATGTGATTAAGGTGACTAAAGAGCCTATCAGTTTGGAAACCCAGTCGCGCAATGATGATGGCAA GTTTGGGATTTCTGGAAGATAAGAATATCGTCACTCCATTGATCACATCATCGGAGAAATTTGAAAGCACAAAT TGAAAGCGTTTGGATCAGTTGAATGAGCGGAGAAAAGCGGTGATCCGCTTGGCTTTTAGACGATGAAA GCGATCGAATTTAGAAAATTTGGCAAGGAATGAATGTTACTAGAGAAAGGTGCGCCAGATTGAAGCTCTCGG ATTAAAAAATTGAGAACCCGCGAGTACGGGCGCATTTAAGAAACTATTGCGCATTTGATGTTAAGGTTTCTCT CACCCAACCCCGCTATTTTGTGTTAAGAAAGAGGGCGTTTATTAGGGTTGGCTCTATCACATAAATCAATTTTT TCATAAGCATGGGTATTTGGGATTTATAAAACCCCTTTTGAATAATGGGGAGAAACGATTTTAAAGCCTTGGA ATTTATCGCTTTGAAGAGTTCCCAATTACATTTCTTGCAATTTAGAGTGAAGAAACAATTTCAAGCGATCGCTTT TATGAAAAAACCAATTATGAGTTAGAGGGCGTTTGAAGGCTTTATTCTAAAGATAAGGAGTTATAGACGTTCTTT TGTAATTATAAGGATAAGAAAGGATATAATGATCAATCTTCTTAAACCTTTAGGGCAATTTCTAGTTTAAATTTAATA CGCTTAAGGGCAAGTTGCAATCTTGTAATTTGACGAGATCTTTTGAAGTAACCAATAAGGAAGTGGCGTTGTTTTGAT AAAAATCTTTTCTAAAGCTC	812	RKHQENGKEPDLEVAEEVGLSLDKV KNVKTKEPISLETVPVGNDDDGKFGD FVEDKNIVSSIDHIMREDLKAQIESVLD QLNEREKAVIRMRFRGLDDIESDRTLEE IGKELNVTREVRVQIESAIFKLRSPQY GRILRNYLRI PNHRYFLFKEEGVYLVGVSITKINFFHK HGVLGYKNPFLKNGGETILKALEFIAFE EFQLHSLHLEVMEENNFKAIIFYEKNHY ELEGRKGFISKDFIDVLLYYKDKKG YNDQSLKL
HP0868	813	TAACGCGCTAGATTATGGGTGTGTGAGAAATGCCACAGCAAGAATGTTATTATCACTCAAGGCAATGAAATGCGGT TGTTGCTCTTAGAAATGTAGCGGAATAACCGATGCAAGAAGAATTAACCGCTTACCAGCAAGAATTTGAAGACACTA GAGAAGTTTAAAAAATCCGTTTGGAAATGAAGCAAGTCCAGAAATTTTGGTAAGAAAAGAGCGCTTTAAAG GTTTGAAGCAAGAAATCTATCAAAAATTTAGAAAATAGAACTCCCGCTTAAACAAAGAAACACAAATACACAAG AGGATGTGATCTTCCCTAAAGCCCTTGAAGAAATGAGATTTAGCAATGAGGATTAAGGCAATGAGGCTTTTA AGCAAGCGCGTGTGATGAAGGGATTACTTGCAATACCGCAGCGTTTGGCGAAAACAGGCTTTTA	814	RKHQENGKEPDLEVAEEVGLSLDKV KNVKTKEPISLETVPVGNDDDGKFGD FVEDKNIVSSIDHIMREDLKAQIESVLD QLNEREKAVIRMRFRGLDDIESDRTLEE IGKELNVTREVRVQIESAIFKLRSPQY GRILRNYLRI PNHRYFLFKEEGVYLVGVSITKINFFHK HGVLGYKNPFLKNGGETILKALEFIAFE EFQLHSLHLEVMEENNFKAIIFYEKNHY ELEGRKGFISKDFIDVLLYYKDKKG YNDQSLKL
HP0868	815	TAACGCGCTAGATTATGGGTGTGTGAGAAATGCCACAGCAAGAATGTTATTATCACTCAAGGCAATGAAATGCGGT TGTTGCTCTTAGAAATGTAGCGGAATAACCGATGCAAGAAGAATTAACCGCTTACCAGCAAGAATTTGAAGACACTA GAGAAGTTTAAAAAATCCGTTTGGAAATGAAGCAAGTCCAGAAATTTTGGTAAGAAAAGAGCGCTTTAAAG GTTTGAAGCAAGAAATCTATCAAAAATTTAGAAAATAGAACTCCCGCTTAAACAAAGAAACACAAATACACAAG AGGATGTGATCTTCCCTAAAGCCCTTGAAGAAATGAGATTTAGCAATGAGGATTAAGGCAATGAGGCTTTTA AGCAAGCGCGTGTGATGAAGGGATTACTTGCAATACCGCAGCGTTTGGCGAAAACAGGCTTTTA	816	RKHQENGKEPDLEVAEEVGLSLDKV KNVKTKEPISLETVPVGNDDDGKFGD FVEDKNIVSSIDHIMREDLKAQIESVLD QLNEREKAVIRMRFRGLDDIESDRTLEE IGKELNVTREVRVQIESAIFKLRSPQY GRILRNYLRI PNHRYFLFKEEGVYLVGVSITKINFFHK HGVLGYKNPFLKNGGETILKALEFIAFE EFQLHSLHLEVMEENNFKAIIFYEKNHY ELEGRKGFISKDFIDVLLYYKDKKG YNDQSLKL
HP0868	817	TAACGCGCTAGATTATGGGTGTGTGAGAAATGCCACAGCAAGAATGTTATTATCACTCAAGGCAATGAAATGCGGT TGTTGCTCTTAGAAATGTAGCGGAATAACCGATGCAAGAAGAATTAACCGCTTACCAGCAAGAATTTGAAGACACTA GAGAAGTTTAAAAAATCCGTTTGGAAATGAAGCAAGTCCAGAAATTTTGGTAAGAAAAGAGCGCTTTAAAG GTTTGAAGCAAGAAATCTATCAAAAATTTAGAAAATAGAACTCCCGCTTAAACAAAGAAACACAAATACACAAG AGGATGTGATCTTCCCTAAAGCCCTTGAAGAAATGAGATTTAGCAATGAGGATTAAGGCAATGAGGCTTTTA AGCAAGCGCGTGTGATGAAGGGATTACTTGCAATACCGCAGCGTTTGGCGAAAACAGGCTTTTA	818	NALDYGVCCEKCHSKNVITCIGNEMRL SLEMLAE

HP0868	819	GATGGAAGACTACGCAAGCAGAACCGCTGGAGCACTGGAGCGACTTGATAGATTGTTGAAACACAGACAGAGAAT CAACAACTAAATTGGACACAGAAATTTGAAATAATTTGAACTTTGAGAAAGTAAATCAATGGGAATCAGCAAA AGATGCTTGATAAAGTAAAGAAATGAGCAGAAATTTAAGCTTGATAGCACTAAACGAGATAGACGCAATTAAG ATTTGATTAAAGGCTAATGAGCAAAATAGCCAAATTAATGAGATGATAAGGATATTGAAACACAGAAAGAGTT GTAAGGAACAAACTTGGAATTTCTAGTCAATGAATTTAAAGTGATATACAGAAATATAATAAAGTATTGCGGTTT GGAGAAAGGAATAACAATTTAGAGAAAGCAATTAGTGAAATCAAGAGAGTAAAGAAATTAGAAAT	820	MEDYASRTAGALERLDKIVETEKNQ QTKLDTENLKIIEETLRSKINGNQKMLD KSKEMSRNFKLDSTKNEIDAIKOLIKKA NEQIANYNEMIKDIEKQKKSCEQTKW FLVNEFKSDIQEYNKKYCGLEKGINNLE KAISENQEVEVKLEN
HP0748	821	CATGCGTTTGGCTAGGGGTTGCCCTTACCTCACCTTGCTAAACGCTCTAATGGTTCGCCAAAAAAGATT TAGCGCTTGGAGCGCAACAAAGGCGATTTAGCTTATTGGATAGCGGAACCTTCCATCTTACTCTCGCCTTTT GTGGGATTGAGCGTTTGAATAATGAAACACCTTTAAGAACTTTGAATTTTCTTAAACCTATGATTTTAA CCACCATCTTAGCTTGCACAAAGCATCAAACTACACCACCTCAATGGCTTTGATTTTAAACGCTTGTG CAAGTCCAGCACCACTGCTTTTACGAGCGCTTAGAGCGATTGTTACAGATCCGCAATTAATCAACCC CTTTATAGGCATTGCTGGGATGGAGTGGGCTTGAAGAAATTTAGGCGGAGTGTGTTGTGGGGATT TGAAACGCATTGAAGAAACCGCAGGTTGAAGAAATTTAGGCGGCAAAAGCGATCAAGAGAGCCTAG ACGCTGTTTGAAGAAATCGCTTAAACACCACTCAACAGCTTTAAGCGCTTCAAAAGCATTTTAAAGAGA CGAATTAGAAATTTCCAAACAATGCATGACAAACAAATCAAGCATAGCCACCAATTCATAGGCGTTTGA TATAGTAGGCTTATGATGCTTAAACAGCAAGCTTGAAGCAGAGAGCGGCGAGGTTTGAAGAAATCTAG CCTTACAAAGCGATGAGATCGCTTTTACCTTTTGAATCAAAACAGCGTGTGTTTGAAGAAATTTATCAAG CGTTTGAAGGATTGGGCGTTTGAAGCGCTGAAGCGATCGCTAAGAAATTTTAAACGCTAGTAGAAATCATTA CCGCTTAAATCGTGCCTTTTAAAGAGCATGTGCTGAGTGGGCGCTGTTTGCAACCAATTTATATGCGAA CAATTAGCCAAACGA	822	MRLARGFAPLYLTLPKRSNGSPKKIAL GAQKGFHSLDSDGTSILLSPFCGDL SVLENEKHFKETLNFLLKTYDFKPTILA CDKHQNYTTTQMAFDNFNTPLQVQHH HAHFLASVLDALLQDPHLNHPFIGIWW DGSAYENKIYGAECFVGDLERIEETA RFEEFWLLGGQKAKEPRRLVLEIALKH QLNKLKRVQKHFKEDLEIFQQMHDK KIOSIATNSIGRLFDIVAFSLDLTGTSFE AESGOVLENLALQSDIEAFYFPEIKNSV VCLKEFYQAFKEDLGVLEPERIAKFF NSLVEITLIVPFKEHVAVCSGGVFCN QLLCEQLAKRLRGLKQYFFHKKHPPN DSSIPJGQALMAYFNPTIJKKG
HP0748	823	GGTTGCCAATTCGCTTAAATCCAAAGAAATCCAAACAGAACCCCTTTGAGCTTTACTCGCTTTAAACCGC CAGATTTACCGCAAGTATTGAAGAAAGAACGCAAGTTTGAACATTTAGACATGGCTAAAGAGGACGCTAATAAG CCTTTTTCAGCCCAAAACGATCGCAACTTACCGCTTATTAATGAGCGCTGTGCTTTCTAAATTCAAACCCC TTGAATTGCTGCTTACGCGCTCTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAG CGTTAAGCGTGTAGTGGTTATAGCCAAAGAGATGAACCTTGTGTTTAACTTTAGAGGCGCTTAACTCTTATG GCGAAACACTACGATAATTTAAAGAGTTAAACCTTAAACCTTAAATTAAGAGAGAGTTGTCTTTAAGGCGTTA GTGAGCGGGAGCGAGATTAACCCCTATTATCGTCTAGAAAGAACGACACAGAAAGACCCCTTTTGTAGAAATTA AAGCGTTTTCAGAAAGAAAGGTGTTTATTGCTGTA	824	GCQFALKIQKESQNRSPFELYSPKLRQ ILPASIEERTQVFRITLDMAKDKANKPFL AQKTIATYRLNNGGVWLSKNSNPLNCC ILARSKAKVRINDLRWVFSQRLSVLV GYSQRDETFLTLEGLNTLMKNYDNL KELNPLNLYEEELSLRALVSGSEINP IIVLEERTEKTLFVEIKSVFQEEKVYLL
HP0748	825	CTAGGGCTTGACAGCGGGGTATAGATTGGCACTTGTGGAAAGACAGCGGTTAGACACGCTTACAGTAACCG ATTGCCATATTGTTTAGGCTATTGAACCCGGAATAATTTCTAGCGGTTTATCAATAGATGTGGATAGGCTA AAAACACATTAAAGAAACAAATCGCTGATCGCTAGGCTAGCGTAGAAGATCGGCTGCTGGTGTGATTGAATTG CTTGATTGGAGCTTAAAGAAATCTTGGATCCCACTTACGCTAAAGG	826	LGPDAGYRVGTCWKDGLDTSVTD CHIVLGYLNPDNFLGGLIKLDVORAKKH IKEQIADPLGISVEDAAAGVIELLDLELK EYLRSNISAKG
HP0748	827	TAAAAAGCCGCTTGGCCACTCAAAAGCGTTTGTAGCTTTAGCTTTAAAGATTTCCTAAAGCCCAAGCTTGAG CATGACAACGATTGTTAATGAGCATGCCAAGAAATGAGAAACCTTTTAAAGAAATAACAGGTGCAATTTGCGGG CGGTCAAGAGCCTTATAAGATGCGCTCATTCGTATCAACACATGGGATCATCTCTTTTATAAAGCGCTTACG CTTTAAACGCCCTAGAGTTAGCCCTAAACGACTTGGATTAAAGGAAATTTGATGCGTGGCAACGCACTTTTAA AGCAATATTAGGAATTTAAGGATCACAATGCATTATCTTATGAACCTTTTAAAGACAGCTTGGAAATTAGTCAA CAAGTAGAGCAATTTGCGGTGTCAGAGAGCCCTTGTGCGGTGATGCGAGGGGCGATGACTTTAGCGCATTTT GAGTTGCACTGGAATTAAGGGAAGTTATGGCATCAATGGGATTTCTATGAC	828	KKAALATQKAVLALGLKIFPKSPSLMT TIVNEHAKELRNLLKEYQVQFAGGQE PYKDALIRINHMGIIPVYKSAALNALEL ALNDLDLREFDGVANATFLKQYGI

HP0748	829	CAAAAGGGAATTGGATGAGTGTGATCATTTGCAGCGAATAATCTATGCTTACAATACCAGCAAAACGAACCGGTCATC AAGCATGCTAAATTTGCGCATCAACCGCAAGGACTTTGTGTTCAATTCAGGGCTAGCGGAGCGGTAAAGCACGCT TTTGCGATCGTTTATGGGATTTAAACCTTTTAGCGGTAAATAGAGTTTGAATATCAACATGAACAAACGCTTCA AAAGCAACGATTTTAGATTTGCGTAAATATTTAGCGGTGTTTCCAAGATTATAAATGATCCAAGATTACACGATTG AGCAAAACATCAAACTACCCATGGTGATTTGTGGGATCAAAAGAAAGAAATGCCACTTGACGCTAGAAAACTTTTAG GGCATATTGATTTACGCCATAAGGCCAACCGCTACCCCAAGAGCTCAGCGGAGCGCAACAAACAGCGAGTGCTAT GGCTAGAGCTATGGCGAATCGCCCTGAACCTCATTTAGCCGATGAGCCTACTGGGAATTTAGACGATTATTCTAGCG ATAAAATCTGGAGCCTGTTAAGGGGCAATGAACACGCAATTAACCGCTACGATCGTGTGGTTACGCACAAAATCCCT AAAAATTTAGTGCTTATCACCAGAAATTTTATATAGAGATGGGGAAGTTTATGAATACTCTTAAAAAAGCATTTAGCC TTTATCATTCCTAGTAGCGTTATTGTTAGCTTGGAGTGGCTTATTATCAATCAAGC	830	QKGI
HP0289	831	GGTTAATTTCAATTACGGAATATTACTACGAGTTTGAATAATTCCTCTATCGTGTTAAGGGGGGCTCTCTTAGG AGGCAGTTTAATTTAAGCAATAACTCTCTTTAGATTTCCAAGGCTCTAGCGCTATCACCTCTAACACGCGCTTAA TTTCTATGATAACGCTTTTCTCAAGCCCCCATCACCTTCCATCAAGCCCTTGACATTAAGCGCCCTTAAGTTTGGG AGGCAACCTTTTAAACCCCTAACCAACAGCAGCGTGTGATTTAAACAAACAGCCAGCTTGTTTTGGCGATCAAGGGA GTTTGAATATCGCTAACATTTGATTTACTAAGCGATCTAAATGATAATAAAATCGTGTGATAACATCATTTCAAGCGGA CATGAATAGTAATTGGIATGAGCGTATCAGCTTCTTTGGCATGCACATCAATGACGGGATTTAT	832	VNFNSANITSLNNSII\FKGAVSLGG QFNLNNSSLDFQGSATISNTAFNFI DNAFSQSPITFHQALDIKAPLSLGNLL NPNNSVLDLKNSQLVI\GDQGSNLNAN IDLSDLNDNKNRVYNIQADMNSNWI ERISFFGMHINDGIY
HP0289	833	GGGGATTTTAGTTTCAAGCACAAGGCAATGTTTTGTGCAAAATTCACATTTCTCAAGCCCAATGGAGCGCAGCTC TCITTTTAAAGCAGGAAATTCGCTCATTTTGGCGGAAACATCATATTGCATTCACCTAACCCAGCTGGAACCTCTTCAAT TATTGTCGATCAAGTTTCTAACATTAACATCACCAAGCTTAACGCTAGCAACGGCTTAAGATTAAACGCGCTAATA ACAATGTTTCTGTCTCAAGGCAATCTGTTGTACGCGTAGCTGCGCAACAAAGCGATCCAACTACAGCTAAT ATTGCAAAACCCCTTGCGGCTTAGCGGCCCAAGCAGCAATGGCGCTCTTCTAATAATGCGTCAAAATAACGCGCCAAT CGCCTTGAGTAATAACGATGAAAGCTTGATGGTTGGGCGGAATGATTTCAATTTTTTACGGCAATATTTACGCTAATGG GGTGTTGATTTTC	834	GDFSNAQGNV\FVQNETFSNANGGTL SFNAGNSLIFAGNNHIAI\FTNHAGTLQLL SDQVSNINITTLNASNGI.KINAANNVVS VSQGNLFVSASCAQSQSDPTTANIANPC ALSAQSTNGASSNNASNNAPIALSNNND ESLMVAANDNFNFSGNIYANGVWDF

HP0289	835	CGACTGAACGATTACAGAAACCTTGCTAACAACCGCTTGAAAGTGCAGATCTCTCAAAACGGCGTTTCTAATAATA AGATGTTCAATCTCGCTAGCTTGATGATTACCAAAAAACCCCTTATAATGAACCGAGAATTCCTATAATTACAC AAGCGATAAGGTTGGCACTTATTATTAACGAGCAATATCAAGGCTTATAATCAAAACAATAAACACCCGGGACTTA TAACGCGCAAAACCAACCTTACAAGCCTTACACATTTACATCAGGCTATCACTAAGCAAGATTTGAACATGATCGC CAGTTTGGGTAAGGAGTTTGGCTAAATAGCCAACTTTTATCTTCAGGGCTTTGGATAATCTCAATAGCCCGAA TAGTTTGAACCTCTTTTGGTATCTTTGAAAGTATGGTATCACCTTAAACCAAGAAATTTGAAGAGCTTATTAAAG ATTATCAATAATTTTCCACACAACTAATTATGATTTCTCAAGGCAATCTCGTTGAGGAGCATCAAGAGAGGGG CAACGCAACACTAAAGCGTGTGTGTTGGAGCGAAGGCTATAAGAGCCATGTGCGGTTGGGATAACACTT GCCAGATGTTAGACAGACTAATTTAGGCAATTTGCTCCTTAGTACGCCCTTATTAGGCTACATTAACGCTAATT TTAGGGCTAAACATTTACATTACCGGAACCATCGGAGCGGAAACGCTTGGGGAGTGGAGGAGTGGCAATGT GTCCTTTGAAAGCGGCACTAATTAGTGTCTTAATCAAGCTAAGATTGACGCTCAAGGAGCCGATAAAATCTTTCTTA CTTGGGGCAAGGGGATTGAAAGCTTTTGGAGAAAGGTTTAGGGAATGCGCTTCTAATATCATTTATGAAGA GAGCTTGAATGATAACGCTATCCCTAAAGATTAGCCCAACATGATCCCTAAAGATTTTGGATCTAAGACTTTAAGCTC ATTGCTTAGCCC	836	TETITETLHNNRLKVQISQNGSVNNKM FNLAPSLDYQKNPYNETENSYNYSO KVGTYLTSNIKGFQNNKTPGTYNAAQ NQPLQALHIYNOAITKQDLNMIASLKE FLPKIANLLSSGALDNLNSPNSFETLFG IFEKYGITLNQENWKSLLKINNFSNTTN YDFSQGNLVVGAKEGQNTKSVVWF GGEGYKEPCAVGDNTCQMFQTNLG QLLHSSTPYLYGINANFRANKNIYITGIG SGNAWGGGSANVSFESGTNLVLNQ AKIDAQGTDKIFSILGQGGIEKLFGEKG LGNALSNIIEESLNDNAIPKDLANMIPK DFGSKTLLSSLSPTENVNLLGVSAFKN AIMEILNSKTVDGVFGENGLNLDPTTE RKKIDQMLLEQIAHSSGFEKIVKTLG IENVENFINNWKQSLSSFANNFVPG GLNQALDKIGSSSSDAKDLQNFDKTTF GDILNQMIQAPLNLKISWLGPDQLSV LVNIALNSITNPSKELTSTISSIGEKAN DLLGDGVWNKIMSNQVLQGMINKIADK GFGGVYQQGLGSLPQSLQDELKKG MGSLLGSRGLHNLWQRGNFNFVAKD YLFTNNSFSNATGGELNFVAGKSIIFN GKNTINFTQYQGLSFISKDFSNISLDT
HP0289	837	CTTTGGCGTTGGCCCAATTCATGGCAATCTTTTCAAGCTATAAGGATAGCGCTGATCGCACCAGAGAGTGGAT TTCAACGCTAAAAATATCTAATTGATAATTTTGTAGAAATCAATAATCGTGTGGTCTGGAGCCGGGAGGAAAGCC AGCTCTACGGTTTAACTTTGCAAGCTTCAGAAAGGATTACTAGCAGTAAATCGGGAATTTCTCTTTATGATGGC GCCACGCTCAATTTGGCTTCAACAGCGTTAAATTAATGGTAAATGTGGATGGCGGTTTGCAATATGTGGGAGC GTATTTGGCCCCCTTACATACGACGATAAACACTTCAAAAGTGACAGGGGAAGTGAATTTAACCATCTCACTGTGG GCGATCAACAACGCGCTCAAGCAGGCAATTCGTAGTAAAGACTCATATTGGCACACTGGATTTGTGGCAAGC GCGGACTAAACATTATCGCCCTCCAGAAAGCGGTTATAAGGATAAACCTAAGGATAAACCTAGTAACACCCAGCA AATAATGCTAAACAACCAACCAACAGCGCTCAAAACAATAGTAACACTCAGGTATTAAACCCACCAATAGCCG GCAAAAACAGAAATTCACCCAGCAAGTCAATGATGGGCCCTTTGCTGGTGCAAGACACAGGTTGTCAATATTG ATCGCATCAACACTAACGCTGATGGCAGGATTAAAGTGGAGGTATAAGCTTCTTACCACCAATGGGCTCAT TTGCATATCGGCAAGGGGTATCAATCTGTCCAATCAAGCGGCGCACCTTTTAGTGGAATCTAACCG GGAATATCACCGTTGATGGGCCCTTAAAGAGTGAATAATCAAGTGGGTGTTATGCTTTGGCAGGATCAAGCGCGAAT TTTGAGTTTAAAGGCTGATCGGATACCAAAACCGCACAGCCACTTTTAAACGATATTAGTTTGGGAAGATTGTG AATTTAAAGTGGATGCTCA	838	LRLGFNGNSFTSYKDSADRTTRVDF NAKNILDNFLENNRVGSGAGRKASST VLTQASEGITSSKNAEISLYDGAATNL ASNSVKLMGNVWMLRLQYVGYLAP SYSTINTSKVTGEVNFNHLTVGDHNA QAGIIASNKTHIGTLDLWQSAGLNIAPP EGGYKDKPKDKPSNTTQNNANNQ NSAQNNSTQVINPPNSAQKTEIQPTQ VIDGPFAGGKDTVVNIDRINTNADGTIK VGGYKASLTTNAAHLHIGKGINLSNQ ASGRTLLVENLTGNITVDGPLRVNNQV GGYALAGSSANFEKAGTDTKNGTAT FNNDISLGRFVNLKVDATANFKGIDT GNG
HP0289	839	CTAGAGGCTTGATGTTTGGCAAAAGGGTATTTTAACTTTTAAAGCAATGGCTATGTTTGTCAATAACAGCTC TTTTAGCAACGCTACAGGAGGCGAGTTTGAATTTTGTGCCAACAGCTATTTATTTTATGGCGATAACAGATTGA CTTTAGCAAGTATCAGGCGGCTGATTTTGTCTTCTAATGATGTTTCTAATATCAATATCACCACCTAAACGCTACT AATGGCTTAAGCTTAAATGCGGGTTTGAATAACGTGAGCGTTCAAAAAGGGGAAATTTGTGTCAATTTAGCCCAATTGC CCCAACAACCAACAGCTCTTC	840	RGLHDFWQKGYFNFVNNSS FSNATGGSLNFVANKSIIFNGDNTIDFS KYQGALIFASNDVSNINITTLNATNGLS LNAGLNNVSVQKGEICVNLANCPTTKN SS

HP0289	841	GAAATAAATAATGAAATTTTAGTGATTCAAGGGCCTAATTAACATGTTAGGACACAGAGACCCAGGCTTTATGG TATGGTAACCTTAGACCAATCCATGAATCATGCAACATTCGTGAACAAGGCAATTTAGATGTGGAATTAGAGTT TTTTCAAACTAATTTGAGGGCGAAATCATTGATAAATCCAAGAGAGCGTGGCAGCGATTATGAAGGGATCATCAT TAACCTGGAGCGTTTTCGCACACTTCTATTGCGATTGCGATGCGATGCTAGCGGGCAACCCGTTATTGAAG TGCACTCACTAACAATTCAAGCCAGAGAGGAATTCAGGAAATCTTACACTGGAGCGCTTGTGGAGCGGTGATC ATGGGATTTGGCCCGCTTGGCTACAACATGGCTTTAATGGCGATGCTCAATATTTAGCCGAATGAAAGCGTTCCCA AGAAGCCCAAAAACAACCCCTAATAACCCCATTAACAATCAAAAATAAAGGGGCTACCCATGAAGGATTAGAAA GAGATCGCATTTACGCTCAATGAGATGCGATGTTTTGAGTGTGCTTATAGTTGCGATAACGCTTTGTTTTGC AATTAGACGATCGCTCGTTTTTATCACTGATTCGCTACACTCAAGAAGCTAAAGAAAGCGTTACGCTTAAAAATG GCGTTTTAGCGGAAGTGGTAGAATCTAGCGATTTAGTGCAAGCGCGATTGATTGTTAAGTTTCGGTTAAAA AACTCTTTTTGACCCCAATCAAGTGAATTTACAACCTACAAGCGTTTAAATCAGCGCTTGGGATAAGGTTGCTT TAGAGGGCGTGCCTAGTTACACCGCCCAAAACGCATCATTAACAACGAGCATGAAATCCAATCTCAAAAAATCT CAAGCGCTGAATGTTGAAGCTTTTGAAAAATTTTGCCGAGTATGTGAAAAGATTTTGATGAAAAGAGTCGTTGAGC GAGCGGTATTGCA	842 K	IFDNNKSAKATGPATIAQGTIKIGE LHLDYHLHVDGELEGVVHKSSTVVIGQ TGSVVGEIFTNKLVSQKFTGTVEAEV VEIMPLGHLGDKISSQELWVERKGILIG ETRPKNIQGGALLINEQEKEK:IKENK
HP0289	843	CAATCTTTTGATAACAATAAATCGGCTAATGCAAAAAACAGGACCGACTATCATCGCTCAAGGCACAAAAATAA AGGGGAGCTTCATTTAGATTACCATTTGCACGTAGATGCGGAATTAGAAGGGGTGGTGCAATCTTAAAGCACGGTG GTGATCGGGCAAAACCGCTCGGTAGTGGTGAGATTTTACTAATAAATAGTGTGAGTGGCAAGTTCACTGGCAC GGTGAGGGCGGAAGTGGTAGAATCATGCCCTTAGGGCACCTTGATGGCAAAATCTTAGCCAAAGAGCTTGTGGTG GAAAGAAAGGGGATTTTGATTGGGAAATCGCCCTAAGAAATATTCAAGGGGGCGTGTGTTAATCAATGAGCAAG AAAAGAAAATGAAAAATAATAGGGAATGATCCCAATCCAGCCTTTATAGAGCCTTAAACAAAGGCTTTGATTACCAAAAT ACTCGCTTGTAAGGATTTTAAAGATCCGAGC	844	FNNSASFNFNNSNATTSFVGDFTNAN SNLQIAGNAVFGNSTNGSCINTANFNN TGSVNISGNATFDNVVFNPGTNTSVKG QVTLNNITLKNLAPLSFGDGTITENAH SVINIAESITNGNPITLVSSS<IEIYNNA FSKNLWQLINYQGHGASSEKLVSSAG NGVYDVVYSFNNQTYNFQIEVFSQNSI SIRRLGVNMVFDYVDMESDHLYYQN ALGFMTYMPN
HP0289	845	ACTTTAACACAGCGCTCTCTTTAATTTCAATAATCTAACGCGACCACTTCGTTTGTGGGGATTTCACTAACGCTAA TTCAAAATTTGCAAAATCGCGGGAACGCTGTTTTGGAACTCTACTAATGGCTCTCAAAATACCGCTAATTTTAATAAT ACCGCTCTGTTAATATTTAGGGAATGCAACCTTTGATAATGTGGTGTATGATGGCCCTACGAACACGAGCGTGAA AGGCGAGGTTACTTTAATAACATCACTTTAAAAAACCTGAACGCCCTTTGCTTTGGCGATGGACGATTACTTT TAACGCTCATTCGGTGATTAATATTGCTGAATCTATCACTAATGGCAACCTATCACTCTTGAAGCTCTCTAAAGAA ATTGAATACAACAGCGCTTCAGTAAATCTATGGCAGCTCATCAACTACCAAGGGCATGGGCGCAAGCAGTGAAAA GCTCGTCTCTAGCGCGGTAATGGCGTTTATGATGTGGTGTATCTTCAATAACCAACCTACAATTTCCAAAGAGGT TTTTTCACAAAACAGCAATTTCTATCCGGCGTTTGGCGTTAACATGTTGATTATGTGGATATGGAAAAATCGGA TCATTTATATTATCAAAACGCTCTCGGTTTTATGACCTACATGCCTAATAG	846	INNATINDYASLIASNGSHLNFNGAVNF NSANITTSLNSSIVFKGAVSLGGQFNL SNNSSLDQFGSSAITSNTAFNFYDNAF SQSPITFHQALDIKAPLSLGNLLNPNN SSVLDLKNSQLVFGDQGSLLNIANIDLLS DLNDNKNRVYNIQADMNSNMYERISF FGMHINDGIYDAKNQTYSTNPLNNAL KITESFKDNQLSVTLSPQIPG:IKNTLYNIG SEIFNYQKVYNNANGVYSYSDDAQGV FY
HP0289	847	AATAACGCCACGATCAACGATTATGCGAGCTTGATTGCGAGTAATGGCTCTCACCTTAATTTAACGGGGCGGTTAA TTTCAATTCAGCGAATATTACTACGAGTTGAATAATCTCTATCGTGTAAAGGGGCGGTCTCTTTAGGAGGGCA GTTTAATTTAAGCAATAACTCTCTTAGATTCCAAAGGCTTAGCGCTATCACCTCTAACACGGCGTTAATTTCTAT GATAACGCTTTTCTCAAAGCCCCATCACTTTCCATCAAGCCCTTGACATTAAGCGCCCTTAAGTTTGGAGGCAAC CTTTTAAACCCCTAACACAGCAGCGTGTGATTAAAAAACAGCCAGCTTTGTTTGGCGATCAAGGAGTTTGAAT ATCGCTAACATTGATTTACTAAGCGATCTAAATGATAATAAAATCGTGTATAACATCAATCAAGCGGACATGAATA GTAATTGGTATGAGCGTATCAGCTTCTTTGGCATGCACATCAATGACGGGATTTATGATGCTAAAACCAACTTATA GTTTCACTAACCCCTTAATAACGCCCTAAAATCACCAGAGCTTTAAAGACAAACCAACTAAGCGTTACGCTCTCTC AAATCCCGGGTATTAAAAAACACGCTCTATAACATTTGGCTCTGAATTTTAACTACCAAAAAGTTTATAACAACGCTAA TGGCGTGATTCTTATAGCGGATGATGCACAAGCGGTGTTTTATC	848	

HP0289	849	GCCTTATCAATTTCAAAGGGAATACGAATTTAATCAAGCCACGCTCAATTTAAGGGCTAAAAATATCCATATCAATTT CCAAGCGTTTCTACTTTTAAACAAACTCTACGATGAATTTAGCTGAAGTTCCCAAGCGAGCTTTAACGCTCTTAA AGTGGAAGGGGAAACGAATTTCAATCTCAATAACTCAAGCTTGTGAATTTCAATGGCAATAGCGTTTCAACGCTCC TGTGAGTTTATGCTAATCATCTCAAAATTTCTTCACTAAATAGCGACTTTTAATCTGACGCTTCTTTGATTTAA GCAACAACAGCACCTGAAATTTTCAAAGCGTTCTTTAAATGGTCTCTAAACCTTTTAGGCAATGGCAGTAACAATC TAGCGATCAACGCTAAAGGGAATTTAGTTTGGTCTAAAGGATTTGAATCTGCTTATATGAATCTATTTGGGG GGGATAAAAAAATCTCCGTTTATGATGTGTTGCAAGCCCAAAATATTGATGGCTTAATGGGAATAACGGCTATGAGA AGATCCGTTTTTATGGCATAACAGATTGACAAGGCTGATTACTCGTTTGATAACGGCTTCAATCTTGGAGATTCACCTA ACCCGCTCAATACGACTGAACGATTACAGAAACCTTGCTATAACACCGCTTGAAAGTGCAGATCTCTCAAAAACGGC GTTTCTAATAAAGATGTTCAATCTCGCTCCTAGCTTGATGATTACCAAAAAACCCCTTATAATGAACCCGAGAATT CCTATAATTACACAAGCGATAAGGTTGGCATTATTTAAGGAGCAATATCAAGGCTTTAATCAAAACAATAAAC ACCCGGGACTTATAACGGCGCAAAACCAACCCCTTACAAGCTTACACATTTACAATCAGGCTATCACTAAGCAAGATTT GAACATGATCGCCAGTTTGGTAAGGAGTTTGGCTAAAATAGCC	850	LINFKGTNFNQATLNLRAKNIHINFGG VSTFKQNSTMNLAESSQASFNAKVE GETNFNLNSSLNFGNSVFNAPVSF YANHQSISFTKLATFNSDASFDLSNNS TLNFQSVLLNGALNLLGNGSNNLAINA KGNFSGSKGILNLSYMNLFGGDKKTS VYDVLQAOQIDGLMGNNGYEKIRFYGI QIDKADYSFDNGVHSHWRFTNPLNTTET ITETLHNNRLKVQISQNGSVSNKMFNL APSLYDYQKNPYNETENSINYTSDKV GTYLTSNIKGFNQNNKTPGTYNQON QPLQALHIYNQAITKQDLNMIASLGKEF LPKIA
HP0289	851	TTTAATGCTTAAAGACAGGCATTTAAGGCATGTGAAGATCTCAAAAGCTTTTAAACGCATGCCAGAAAAACTTGCC TTTACGGCTAAATTTGAATTTGAATGCGAAGCTTTGAAGAGGCCAAACCGCCATGAATGCGGAGCGGATATTG TGATGTGCGATAATTTGAGCGTTTGAAGACTAAAGAAATTTGCCCTTATAGAGATGCGCATTATCCCTTTGTTTTACT GGAAGCGAGCGGGAACATTTCACTAGAGAGCATTAACGCTTACGCTAAAGCGCGGTGGATGCCATTAGCGTAGGG GCTTTAATCCATCAAGCCACTTTTATTGACATGCACATGAAATGGCTTAAAGACTTTAAAGAGGGTTATTAAACATGC TAAAGAAATATTAGAAAGCATTAAGATCTTACGCTGAAAGAAATGAATCACTCAGCACCGCCCTTCTTTATACAACTT GCTTAATCAGTTAAACCACTTTCAATAAGAGTTAAGATTGAACATGAGCCTGAAGAAAGCAAGGAGCCAGCC TGATTTTCGGCTTCTTCAAGGGATAAACATCGCTATATAGAAATAAAGAGAGGAGGACCAATCTTAGCCAGCT TTTAAAGCGGAAAGCGGATCAATCCTTAAATACCTTAAAGAAATTAACCTAATGCTCAGCAGGATTAACCTTAAT TTCATGTGGTAGGAAAGATGAAATATGAGCCTTTAATCAAAAGAAATCTCTGTCGCCAGCCTTGATGAACCTC TCTAAACCCCTAAACCCCAATCCGCAACCGAGCGGATTTGATTGAATTTGTTCAAAAGCTTTTCAACCCAGCAAGCA GCCCTATTACTAACGCTAAAGATTTTGCCACGCTTAAAGCCGCGCAGCAAGTATTAAAGAGCGCTTAAATCAAA TACCAAGAAAGCGCAAGTTTCTAGCATTTTAAACACTTTAAGAAATATCTTTATGAAGAAATGAGCTTTGAAGACT TTAGCGAT	852	LMLKDTLHRHVKDLKSFLTHARKNLPF TAKIECESEFEEAKNAMNAGADIVMC DNLSVLETKIEAAYRDAHYPFVLEASG NISLESINAYAKSGVDAISVGLIHQATF IDMHMKMA
HP0383	853	CCCTAGTCGGTAATGGGTATCTGGAATAGAGGCCACAGCTCTGCCAAAAATTTTTCGGATATCAAGAAAGAAATTG AATGAGAAATTTAAAAATTTCAATAACAATAATAATGAGCTCAAAAACAGCACAGAACCCCATTTATGCTAAAGTTAATA AAAAAGAAACAGGACAGTAGCTAGCCCTGAAGAACCCCATTTATCTCAAGTTGCTAAAGAGTAAATGCAAAAATTG ACCGACTCAATCAATAGCAAGTGGTTGGTGGTGAAGCAAGCAGCGGCTTCCCTTTGAAAAGGCATGATAA AGTTGATGATCTCAGTAAGGTAGGGCTTTCAGCTAGCCCTGAACCCATTTACGCTACGATTGATGATCTCGGCGGAC CTTCCCTTTGAAAAGGCATGATAAAGTTGATGATCTCAGTAAGGTAGGGGATCAAGGAATCAAGAAATGGCTCAG AAATTGACAATCTCAATCAAGCGGTATCAGAAGCTAAAGCAGGTTTTTTGGCAACCTAGAGCAACGATAGACAAG CTCAAGATTCTACAAAAAAGAAATGTTATGAATCTATATGTTGAAGTGCAAAAAAGTGCCCTGCTAGTTTGTGAGCG AAATTGGACAATTTATGCTATTACAGCCACACAGCATTATAGCAATATCCAAATGGAGCAATCAATGAAAAAGCG ACCGGTATGCTAACGCAAAAAACCCCTGAGTGGCTTAAGCTCGTGAATGATAAGATAGTTGCGCATAATGTGGGAAG CGTTTCTTTGTCAGAGATGATAAAATTTGGCTTCAACCAAGAAATATGAAGATTATCTGATTCTGTTCAAGTTTCC ACCAAGTTGAACAATGCTGTAAAGACATTAAGTCTGGCTTTAGCCACTTTTACGCAATGCAATTTCTACAGGATATT ACTGCTTGGCGAGGAAATGCGGAGCATGGAAATCAAAATGTTAATACAAAGGTGGTTTCCAAAAATCTTAAA	854	LVGNGLSGIEATALAKNFSDIKKELNEK FKNFNNNNGLKNSTETPIYAKVNNKKT GQVASPEEPIYTVAKKVNKIDRLNQL ASGLGGVGQAAAGFPLKRHDKVDDLSK VGLSASPEPIYATIDDLGGPFPLKRHDK VDDLKSVGRSRNQELAQKIDNLNQAV SEAKAGFFGNLEQTIDKLKDBSTKKNVM NLYESAKKVPASLSAKLDNYAINSH RINSNIQNGAINEKATGMLTQKNPEWL KLVDKIVAHNVGSVSLSEYDKIGFNO KNMKDYSDFKSTKLNNNAVKDIKSGF THFLANAFSTGYCLARENAEHGKINV NTKGGFQKS

HP0507	855	TCCCTTAAGTTCATTGGTTTACGGGTTTGATTTACCCCTATTGGAGCGCTTATCCTTGAATAAGATTTAAAC TAAACCCCTTTAAGGCTCAATCAATGCCCTTTAAAGCTTAAAGCGAAGCTGCGCATTTAATTTAGGCAACTATT CAAACCAACCAATTCATTCCTTACAACAACCAACCGCTATGACTCAGGAGCGATTCAAGCCCTTGCAGGAGTGATTCT ATCGCTTTGATTGATGAAGGAGTTAGATTAGTTCAGGGCGAATTTAAAGTTTGAAGTTTAAATGAGCTTTT AACAAATGCTATAATGATAAGTTCAAAACCCCACTCAATAAGGTTCTGTTGTGATACTACACCTATAGCGAATTGTT AAAAAGCTTGCAAAACAATGCGATAATATCGCTTAAATCATCAAGCCTGAAAGATCAACAAGAATTAGAACGCAT TGAAAAGAGCAAGAGATCCTAATTTTGGCAAGATGCTTAAAGGCTAGACACCAATAAAGAAAAGTGCGCTT GAACCGCTTGCTAGAACCTATCAAAAACCAAAATTTCTTAGATGAAAGCTAGAAATGTTTGAACCTCGCTCAAAA CGATAACGATGAGGTACTTTATCCTTGCTCTATGAAGAGGCTCCCATTTTAGAGAACAGCGTCCAAAAAGTAGAAAT TGAAATCATGTTAAGCGGTGAAAACGATGCTCAAAACGCTATTATCACCATTGAGCTGGAGCGGGGGGACTGAA AGCCAGGATTGGGCGAGTATTTGTATCGCATGTATTTGAGATGGCGGAAAGAGGGGCTTTAAAAGCGAGATTTT AGACTATCAAGATGGCGAAGAA	856	PLSCLLVLRVLILPLLERLSLNKDFKLKP FKAQINAPLKLKGERAHLILGNYSNHQF IPYNNRNYDSGAIAQALARVDSIALIDEG VRLVQGEIEILRFEN
HP0507	857	AGGTGTTCAAGACAGCAAAAAGACGCTTGCGGTTTCATCTATGAGATCAGCGAGTTCATGAAAGCCTATACCGCA TTGCTAAAAAACAAGACCGATAGCTCTATTATTGAGGTATCTCCCTCTAGGTATTGGCCAGCATTTTAAACGACT GCCCTTTATGTCAATACCCCTGATTTGACGCTTTGAAAAGCTTTGGTGCTTATTATACCAACTTGGATTGCAG GAGGCACGATCAGCGCATCAAGCAACCAAGTATCAACATTATCAAAACGTTAAAGCAATAAGAGCGTTGAAACC ATCAAAAGAGCTTATATTGAATAGCATCGACTCTTATAACACCTTGATCAATACCTCTATAACTTATGGGATAGCTCTT CTGTTTATCATAGCAATGGTGCTGCTGCTTAGCCCTAGCTAATTTTCCACAAACGCCCAAAAGAGCGAGTCAATGGAACGC TTATCGCTATGATGCCGAAACCCCAAGTGAGCATATTTTCCACAAACGCCCAAAAGAGCGAGTCAATGGAACGC GGATTTTGACAAAGAAAAGAGAGAAATGGTAAATAATATCGGAATTTAACCCCTTTTAAAGCGTAAAGAAAGAACGC GCATGCTTTAAACGGGATTTTGATGAAAAGAAAATTTATGAGGCAAGACACGAGCAAGTATGATGCTGTTA TGACATCACTAAAGATTTGATAGCAATTTATAGGAAGTGAATG	858	VFKDSKKDACGFIYEISEFMKAYTALLK KQDRYVYLLRYLPSPRYWASILTALYV KYPDFDALKLLVSYYYQWTWAGGTITR IKQTSINIKNVSNKSVETIKELINSIDS YNTFDQYLYNLWDSSSVYHSKWVRPV LALANYFMADEEKPHFIAMDAAETQVEH ILPQTPKRGSQWNADFDEKREEWVN NIANLTLLKRKNNAHALNGDFDEKRKIY GGKDTSKVISCYDITKELYSNYRKWN
HP0507	859	CACITTTCAAGAGCTTGAGCGTGTTACGGCATGGTGTAAACGCGAAGTGGCTGAAACTTTAGAAAGAGGTGG AAAAAGGCCATTATAAGCATTTCCAAACGCTTTGAAAATGCAAAAGTGGGCAATCGCTAGGTAGAAACCTTA GGCGCTCAAGTGGCTTATGATAAGGCCCATATCGCTAGCGTTAAGGCTAAAGACGTGTAGAAAGTTTCGAGCTCTC GTTCAATTCCATTTTATCTAGCAAGGAGCATTTAGTGCCCTTCAAGCAAAATTAGAGATCCGACGAGAAATCTGCC CGATCTGAGCTTTTGTCTTCCACGCTCAATTCCTACCCGTTTAAAGACTTTAGAAAATCAGATTCAAATCTCT AAAGAAAACACGAAATTACAGATCGCTAAATCTTGCCCAAGTGAGTTTGTGGCTCTTATATTATGAAGCAAAACA ATTCGGTGTGGAAGACATGATCCCTAGTTGTTGTGGCGTGGCCGGCGCATGCCATTCTTCTCCACACAGG GCGGATTCAAAATACCAAGCGAGCAAAATTAGCGGAGTTGCAAGTGAGTAGCGAACAATCCAGGCTAAAAAACA TGGAATTATTAGTGAATAAGACTTATAAGAGACGCTTTCTTATTGAAAGATACAAAAGCTTGTCTTCTAGCGTGGA ATTAGCCCAAGGAAACTTAAACTCCAGAGCAGGCTTTTACAAAGCTTAAAGCAAGCTCAAGTCAATTGATGC GAGGAACACGCTTTCTCTATCGTGTGGAGCAAAAAGCGTGGCTTATAAATACATCGTTTTCATTAGCGAATTTAAT GGCGTTAAGCGGATCATATTGATTTTATGAATTTGTTTAAAGGGAATAAATCATGTCAAATAGCATGTTGGATA AAAATAAGCGGATTTACAGGGGTGGGCTTTATTATTAGGGCTAATCGTGCTTTTATTATTAGCTTATCGCCCTA AGGCTGAAGTGT	860	TFQELSVVYVYGMVLNAEVAETLEEVEK GHYKHFNALKMQKV/SQIARVETLGA QVAYDKAHIASVKAKD/VLEVSQSFNSI LSSKDDLVSPSSKLEIRTEKNLPDLSFFV SSTLNSYPVLKTLNQIQISKENTKLQIA KFLPQVSFFGSYIMKQNNNSVFEDMIPS WVFGVAGRMPILSPTGRIQKYQASKLA ELQVSSEIQAKKNMELLVNKTYKETL SYLKEYKSLSSVELAKENLKLQEQAF QGLSTNAQVIDARNTLSSINVEQKSA YKYIVSLANLMA LSDHIDL F YEFVY

HP1158	861	TACAAATTCATCGGCTATGGGAATATGGCTCAAGCGATTTAGAGGCGCTCATGAATTTTATCCAAAGCGTTTATTTT AGAAATTACGGGGCGGAAACCTGAAAAATCGCCCTTTTACAGAAAAACATTCAGCTCAAATCGTGCCTTA CAAAGACGCTATTGATATACACCAAAATTCGTGTTTACITTTTAAAGCTTACACCTTAAGGATTTTATTTATCAAG GGCAAGCTAAAGCGTTTGAAGCGCTTATAGCTGGGTGGTTTAAAGCTTAAAGCGATGCGATAGATCTTTACATT ACCTTAATGCATGCCCAATATCGCGAGCAAGTTGCGCTTTCTCTACGGCGGTGTGTGAATAATCGCCCATGCCC TTAATAAGCCAAAGGCTTTGAGTGTATTGAGAGTTTGGGAATTCGCTGCGAGTGGCCATGAAGAGTTGGTGA TGCCAGCGTAGCGACAAACGGGAGCGCTCGGCTTTTAAAGCTTGGTAGCGAATAGTTGAAGAGTGGCGGTATT AGAGAGGCTTGAACGCTAGAGGTTCTTTAGAAATGGTGAAGATGAGTTTAAAGGCTTGGCAAGCTGTAGAAAA AGAACGCCCTGAATGATTATAGAGCAATTTGACCCCTTAAAGCGCAACGATTGAAGCTTGAAGCTTTAGAAA AAAAGGGAGTTAGGGAGCGTTTATAGAGCTTGCCATAAAAGCGTGAAAAATGCGCTCTAAAATTAACACTCT TAAAAATCAGCGGATGCAATTTAGACAGGAGAGTTTGAAGAAAGCGCAAGCACTTGATCCAAAGCGTCTGATTGA CACCATAGAGTAGGCACAAATCAAGGCTTGCAAGAAATCCATCGGTTTGTGTTGAAGGTTGATGAATTTGCTG GGAAATCAGGGATAAAACATTTGCTAAAGGGAATTCAGGTTGCTAACTGCTGTTGATTTGGATTTGATTTACCCA GAATTGAGAGCATGCC	862	QFIGYGNMAQAILEGAHEILSKRFILEIT GRNPEKIAPFLQEKNIQAIQIVPYKDAIDI HOKFVLLFKPYNLKDFNYQGQAKSVL SALAGVGFKALSDAIDSLHYLKCMPNIA SKFALSSSTAVCEKSPMPLISQKALSVE SFGNCVRVGVGHEELVDASVATNGSALA FLSLVANSKLDAGIREGLNARGSLV KMSFKGFAKLLKEKERPEMIEQICTPKG ATIEGLSVLEKKGVGRGAFIEACHKSVKK MRL
HP1158	863	TTTAGGGGTTGATGGGTGAGTGAGTTGCAAGCGTGGGGGCTTTGTAAAAGATTATGAAGTAACGCTTCAAAAC GATTCTGATCGCTATACTTGAAGTTAGAGCAAGTCGTAACGCGATTAAATTTCCAATAACGATACCGGTGGG GGCGTTATTTAGAAAACGGGTTGAAAAATTTAAGATCGCATGGCTATATCCAATCTTTGAAGGATTTAGAAAGAA ATTGTGTTAAAGAAAGGGGCTATCCCTTTAAATCAAGATATAGCCAGCGTTAGGCTAACGCCCAACCCACG CCGAGGGCGGCCAACCTTAATGGCGATAAGGAAGTGGTGGCGGATTGTTATGGTGGCTATCACGCTGACAC TTATAAGGTGCTTAAAGCCATTAAAGAAAAATCGCCACCTTACA	864	LGVDGVSEVASVGGFVKDYEVTLQND SLIRYNLSLEQVANAIAKNSNDTGGVI LENGFEKIRSHGYIOSLKDLEEIVVKE GAIPLIKIDIASVRLTPKPRRGAANLNG DKEWGGIVMVRYHADTYKVLKAIKEI ATL
HP1158	865	AGGGATTAAAAAGGTGTTCAAAGACAGCAAAAAGACGCTTGGGGTTCATCTATGAGATCAGCGAGTTTATGAAA GCCTATACCGCATGCTATACTTGAAGTTAGAGCAAGTCGTAACGCGATTAAATTTCCAATAACGATACCGGTGGG ATTTAACGACTGCCCTTATGTCAAATACCTGATTTGACGCTTGAAGGCTTTGGTGTCTTATTATACCAAA CTTGATTGCAGGAGGACGATCAGCGCATCAAGCAACCAAGTATCAACATTATCAAAACGTTAAAGCAATAAG AGCGTTGAACCATCAAGAGCTTATATTGAATAGCATCGACTTTATAACACCTTTGATCAATACCTCTATAACTTAT GGGATAGCTCTTCTGTTATCATAGCAATGGTGCTGCTTACGCTAGCTAATTTATTCATGGCAGATGAAG AGAACCCCATTTATCGCTATGGATGCCGAACCCAAAGTGAGCATATTTGCCACAAACGCCCAAGAGGCGAGT CAATGGACGCGGATTTGACAAAGAAAAAGAGAAATGGTAAATAATATCGCAATTTAACCTTTTAAAGCGT AAAAAGAACGCGCATGCTTTAAACGGGATTTGATGAAAAAGAAAAATTTATGGAGGCAAGACACGACGCAAAAGT GATTAGCTGTTATGACATCACTAAAGATTGTATAGCAATTATAGGAAGTGGAATGAGAAAGTCCCTCCAGAGCGGATA CAATCTTTGTATAACACTATCAGCGCTGTTTACACATAGAGGGGCAAGAGATGATTTTGAAGATGATTTGATCTA GAATGATTAAAGATTGCCAAGCATCAAAACAAAGAGGTGATCAATGCCATAAAAGAGCTATTAAAGATGTCAAA GAAAAGGATTTTAAAGACTTCTTAAAGAAAGCCAAACAGCACCGCCCTATTGTTTCTATACAGATAATGATTGAT GGCATGTTAG	866	GLKKVFKDSKDKACGFIYEISEFMKAYT ALLKKQDRYVYLLRYLPTRYWASILTTA LYVKYPDFDALKLLVSYYYQTWAGG TTTRIKQTSINIKNVKSNSKSVETIKELJN SIDSYNTFDQYLYNLWDSSSVYHSKW VRPVALANYFMADEEKPHFIAMDAET QVEHILPQTPKRGSQWNADFDEKRE EWNVNIANLTLKRKKNHAHALNGDFDE KRKIYGGKDTSKVISCYDITKELYSNYR KWNEKSLQERYKSLYNTITPVLHIEGQ EDDFEDDFDLE
HP1158	867	CCCTCTCAAGCCCTTGATCGAGCTTTAGAGAAATCAAAACTTCGCCGCATAAAGGCACCTTTAAAGGCTAAAGT CCTTGATTCTAAAAACCAAGCAAGTTTATAGCGTTTATAATATCTCCACACAAAAACCTCACGCTCACTATCACC CACATATCCACTGCAATGCTATCAACCCCTTGATGAAAAACTTTCTTTAGAAAAACCTTAAACCTTAACCGCCCT ACTATCCCTAGAAACACCCAGATTGTTTCTTCAAAAGAAATGAAAGAGTCGCCACCCGACCAATGCTTCTTTA AACGCGCCCATGCAAAAAACCAAAACAAACCCCATTCATCGCAACACCTTCTCAAAACTTTCTTACCCAGAGCCC AAACTAGGCTCTAAAAACTCTAAAAACAGCCTTTTACAGCCTTTAGCAATTCCTAGCAAAATAAGTCCCACTAACGAA ACTCAA	868	PLQALVIELLEEIKTSPHKGTFKAKVLD SKKPRQVLGVYNISPHKKLTLTTHISTA IVYQPLDEKLSLETTLPNRPRTIPRNTQI VFSSKELKESHPHQMPSLNAPMQKPQ NKPHSSQQPSQNFYSYPEPKLGSKNSK NSLLQPLAIPSKISPTNETQ
HP0068	869	TAGTTGGCAATCTAAGGGATTAAACCCCTTGATTTCAGCGTGATCATGTGGATTGGAAATGGTTGAAACGAGG AAAAAATCGCTGTTTAAACCAAGCAAGCAAGACATAGCCATACGCTTAAAGACGCTCCCAAGTTGGGGCT CTCTCAAGGGGATATTTTAAAGAGAGAGAAATATCGCCGTTAATATCTTGGATTCTGAAGTCATTACATC CAAGCCAAAGAGCGTGAGAGAGTACGGAATATGCTATGAATAGGAACCGCCATCGGCTTTTACTACTATGGCG AGTCTCAATTTGAATTTAAACACCATTTGAAAGGCCACCGTAGCGTTATTAGAAAGCTAGGGGTTCAAAATCGTG	870	VGNLRDLNPLDFSDHVDLEWFETR KIARFKTRQGGKDIARLKDAPKLGSLQ DILFKEEKEIIVNLDSEVIHIQAKSVAE VAKICYEIGNRHAALYYGESQFEFKTPF EKPTLALLEKLGQNRVLSKLDSEKER

		TTTTAAGTTCAAAATTGGATCCAAAGAACGCTTAACCGTGAGCATGCC		LTVSM	
HP0068	871	GTAGCACTGGTGATGTAGTGAACAAATAGAACTAGAACAAAAAAGACGAGCAATATAGAGACTAACAAAT CAAATAAAGTAGAACAAAGAAAAACAAAGACAAATATAGAGACTAATAATCAATAAAGTAGAACAAAGAACAA CAAAAGACAAGCAATACACAGAAAGATTGGTTAAAGAACAGAAAGATTGGTTAAAGAACAGAAAGATTGGTTAA GAACAGAAAGATTGGTTAAAGAACAGAAAGATTGGTTAAAGAACAGAAAGATTGGTTAAAGAACAGAAAGATT GCCAAGAAATCATAATCAATCTTTTAAAGAAAGGAGGAAATTAAGGCTGATTGGTATAGAAAGTAGAAGCTGAAT GCAAAACCCCTAAACCTGCAAAACCAATCAAAACCCCTATCCAGCCAAACACCTCCCAAACTCTAAACAACCCCGC TCTCAAGAGGATCAAAAGCGCAAGAGCTTATCGCTATTGCAAAAGAGCTAGAAATTTCTGCCCTATTGCAAAA GCTATCGCTAAACAAAGTGGAATTTTACAGGCCAAGTTCTATCGCTATTAGAACTAGATCCTAGAGATTTAAGGTTA CAGAAGAAATGGCAAAAGAAATCTAAATACGCTCAAGCTCAAGCTAAATGCTTGAATGAGAAACCCACAAAG CCCACCTTTCAAACTCTCAAGCCCTTTTGTGCTCAAAATATTTGCTGATGTTAATAAGAAATAGAACGAGTTGC TAATACTGAAAGAAAGCAGAAAGCGGGTATGGTTATAGTAAAGGATGTAGCGGTTAAACATTTGACCAAGT TTTTAATTATCTGTGGCTTTTGAACACATTTTATGTTAGCGTTATTTGCAATAAAGAGATCCTTATTAAAGCT TAAGCTATCCCTAAAGTAAGGTAAACCTTACAAATGGAGGTTAAACGCGCAATAAACTCCAAAGAGCCGACTTTT TAATCGT	872	STGDVSEQIELEQEKQKTSNIETNNQIK VEQEKQKTSNIETNNQIKVEQEQKTS NTQKDLVKEQKDLVKEQKDLVKEQKDL LVKEQKDLVKTQKDFIKYVEIQNCQENH NQFFIEKGKAGIGIEVEAECKTPKPA KTNQTPQPKHLPNSKQPRSQRGSKA QELIAYLQKELEFLPYSQKAIKQVDFY RPSSIAYLELDPDRDFKVTTEE/QKENLKI RSKAQAKMLEMRNPQAHLSNSQSLLF VQKIFADVKNKEIAVANTEKKAEGY GYSKRM	
HP0069	873	ATTGCTCTATAGTGAATCATTTGTCGAGGCGAGTGCGCGCAATGAGTTGTTAAATTCAACCGCTTGACACCA AAATCTCTATTTTACAAGATGAGAAACCCATCTATTATGACAAACACGATTTTAGATCCAAACCCACCGACTTAATAA CATGTGCATGTTGATGGCTATACGCATTTTGAATTTGGTCTGTCAATGGCCCATAGAGCTCTCTGGTGTGCG AGATGCATTTGAAGAAAGCGAAGGGTGATGGGCGAGTGAGTGAACCGCTAGTTCTCATTTATGCGTGAAAGCT TTAGCGAAAGGCTCAGAACCTTATTGCATTTAAGAGAAATCGCTGCTGTTACGCAACCCAC	874	LLYSEIVAGRVARNELFKFNLHTKISI LQDEKPIYDNTILDPKTTDLN NCMF DGYTHYLNVLVNCPIELSGVRECIEES EGVDGAVSETASSHLCKVKA/KGSEPL LHLREKIALRVLTQT	
HP0066	875	TAAAGAAATGTTAAACAACCACTTCAACAACGCTGGCTTTAGGTGTAATGGTGAGAACTTGAGCGCTATCAAAA AAGATTTACCTCTATTAAACAACGAACTCAACGCGCTATTGTAGAGCTTTCTAAAGACAGCCATCTGAATTCAGGC CTTTCAGCTTATAGGTCATAAAGGAGGAGTAAAGAGCTAAAGGACTTAACTTTTGAAGTGCTTTCAAAACC TTTTGCGTGCGTGTGCGTAACCAAGCGAGGATTTTCTCTTAATGCAATAAGGTTCTGAGCGCTTTTCGCTAAA GCTTTCAGCGCATAAATGA	876	KELNNHFQRLAFRCNGENI.SAIKID LPLLTNELNALFVELSKDSHTE.FRPFSL	
HP0187	877	ACTTGGGCTTAAGCCCATTAATAATGGTTTGAAGGATAAACCCTCTCTATAGCGAAGTAACCCAGCGATCTATAAC CCATGCTCTAAAGTGAGCCGGTTAGGATTACGCTAGCGGATTGAAAGGGGTGAAAGAGCATGGCTTAGAGG GGTGAGCGGGTTGCATTTCCATACGCATTGCGAGCAAAACGCTGACGCTTTGTGCGGACTTTAGAGCATGTAGA AAAGCATTTAGGCCCTATTAGAAACATGGCGTGGTGAATTTGGTGGGGGCATCATATCACTAAGAGCGGATT ATGATGTGAATTTGCTCATCCAAACGATTAAAGGATTTCAAGAACGCTATCATAATATAGAAGTGATTTTAGAGCCTG GGGAAGCCATAGGTTGCAATGCGGTTTTTAATCGCAAGCGTGATAGACATCGTTCAAAACGATCAAGAAATTGC GATTCTAGACGCTTCTTTAGCGCTCACATGCCCGATTGCTTAGAAATGCCCTATCGCCCTAGCATTTTAAAGTCTC CGTAGAAATGATGAAGAGCTTATTGAAGTTGAAGGGCGGAAATCAAGGGCGT	878	LGLSPIKMGRLINPLYSEVTPA.YNPCS KVSRLGITPSGFEKGVKEHGLEGVSGL HFHTHCEQNADALCRTLHVEKHFPR YLENMAWVNFEGGHHITKSDYDVNLLI QTIKDFKERYHNIEVILEPGEAIGWQCG FLIASVIDIVQNDQEIILDASFSAHMPD CLEMPYRPSIFKVSVENDEELIEVEKGE NQGA	
HP0187	879	GAGCGAGTGTGTGAGCGCTTACTTCTGTAGGCTTAGGGCAGCCCTAAACATTGAGTTTCAAGTAATGACAAA CGGATGCAGGATAATTTAGTGAAGCGTGATTGAAACAGACCAATAAAGGTGCGTATTTTAGAATCAAACTTTTA AAATCTAGCCAGGATTTAAATGGTGTGTTATTGAAGATCCGACACTAAATACATATCCCGCTTGTGTGAGTAAAG GATGGTAATTTAATCATAGGCTTAGCAACATATTTTAGCAATAAAGCGATGATGCAATTTAGTGCAGAAACC AATCAAAAGATTCAAGCTCTTAACGCCACCAACAAATAGCCGAAATTAACCGCTATTTTAAATGAATACCGGCT GATTATGCGTAGAGTTGCCCTCTACTAACGCTGCAATAGGATAAATCCTTTATATTGCTCTGATCCCATGTGC CCACATTTGCCAAAGAGCTCACTAACTTAGGATCATTTTAAAGAAACACCGTGAGAAATGGTGGTGGGGTG GCTTGGGGTCAATTCAGCTAAAGGCGGCTTTAATCCAAAGAAATGGCGAAGCTAGGGCTAGGGGAGCGGAGC GTGGAGATAAGATCTCTATTCTTGAAAAGATTATTCC	880	ASVLSALLVGLGAAPKHSV.SANDKRM QDNLVSVIEKQTNKKVRILEIKFLKSSQ DLKMVIEDPDTKYNIPLVWSKIDGNLIIG LSNIFFSNKSDDVQLVAETNQKVQALN ATQNSAKLNAIFNEIPADYAIPLPSTN AANKDKILYVSDPMCPHCQKELTKLR DHLKENTVRMVVVGWLVGNSAKKAAL IQEEMAKARARGASVEDKISILEKIYS	

HP0187	881	ATGGGATGGAATTTGGCGTGAAATCCCGCTATCAATCAAGGATTTGAGGGCCAATGGGCTGATGTGGATTAC AGGCGTTTGATGCGTTCTATCAATACACGATAGGTTTAAAGCTCTTTTAAAGGCTTATAAAGAGGCTTTTACT TTTTTTTGGTATCTAACAGCTTTTAAATAATCCCAATCTACTTTGTTTAAAGGATAATATTTATGGCAGATGCGTT GTGGGATCCAGTGGGAGATGAGGGAAGGAAATTTGTTGATAGGATCGCTAAAGATTATGACTTTGTGTGTC GCTATCAGGGCGGCAATGCTGGGCATACCATTTGTCATAAGGGTTAAGCATTTCTTGCATTTAATGCCCTTCA GGGTTTTATACCCCAATGCAAGAACATCATTTCTAGCGGGTGTGAGCGTTAAGGATTGTGCGAAGAAAT CAGCGCTTTGAGGATTTAGAAATCGTTTGTGTCAGCGACAGAGCCCATGTGATCTTGCCCTATCATGCCAAA AAGACGCTTTTAAAGAAATCTCAAAACATCGGCACGACTAAAAAGGCATAGGCCCTTGCTATGAGGATAAAATG GCCAGGAGCGGATAAGAAATGGGGATTTATTAGACGATAAAATCTTAGAAGAAAGCTAACCGCTCATTTCAAAGC CATTGAGCCTTTTAAAAAGCGTATGTTTGGCGAGAAATACGAAAGATTTGATGGGTATTTTAAACTTACGC TCCAAAAATTTGCCCTTTATCAAGACACGACAGCATGCTGATAGAGCGAATCAAAAGGTGAAGAAATCCTATT AGAGGGGCACAGGCGCTTTAGACATTTGATTTAGGACTTACCTTTTGTAAAGCTTAACACACGAGCG CTAGCGCATGCGTGAGCACCGGCTTAAACCTAAAGCGATCAATGAAGTCATAGGTATCACAAAGCCTACTCCACT CGTGGGTAATGGCC	882	GMEFGVKIPAINQRYLRANGADVDRR LYAFYINYTIGF
HP0187	883	GAATGGGTGGAGATTGAGGGTGGAGCATTTGGATAAAGTGATTTATTAGATCAAGCCCCCATAGGCAAAACCC CACGAAGCAACCTGCCACTTACACGGGAGTGATGGATGAATCAGGATTTTATTGCCGAGCAAAAGAGCTAAA ATTTAGGCTATAGTGGAGCGCTTTAGCTTTAATGTTAAAGGAGCGGTGCGAGAAATGCCAAGCGGATGGG ACATTAATAGAAATGCACCTTTTCCCTGATGTGTTAGTCAATGCGATAGCTGAAGGGCGCTAAATACACACCC AACTTTAGAAATCAAGGTGAAGGCAATCCATTGCCGATGTGTTGAACATGAGCGTGAAGAGGCTTATGAATTT TTGCTAAATCCCTAAATCGCGTGAAGTTAAACGCTTATGGATGTGGCTTAGGCTATATCACTTTAGGGCAA ACGCTACGACTTTAAGTGGGGGAGGCTCAAGGATCAAAATAGTAAAGAAATGAGTAAAGAAAGACACAGGCAAA ACCTTTATATTAGATGAGCCTACTACCGGTTTGCATTTTGAAGACGTGAATCATCTTTTACAAGTCTTGCACTT TAGGGCGTTAG	884	NGVEIVGLEHLDKVIYLDQAPIGKTPRS NPATYTGVMDEIRILFAEQKEAKILGYS ASRFSFNVKGGRCCKCQGDGDIKEM HFLPDVLVQCDSCKGAKYNPQTLEIKV KGKSIADVLNMSVEEAYEFFAKFPKIAV IKLKTLMQVGLGYITLGNATTLGGEA QRIKLAKELSKKDTGKTLYLDEPTTGL HFEDVNHLLQVLHSLVAL
HP0187	885	ACAAACTATCAGCTCTTTCAAGCGCTAAAGAAGATTAAAGCGTTTGGTATTCAAAAGGAAATTTTACATTAGC GTGAATGAAGAAATGAAAAGCCCTTTGAATTTGATTTACCTAACGCTAAATAATTGCAGGGTTTTCATTAGAAA CCGACTATGATGGCTTGGGATAGACCGGCAATGGCGTCTGCGGTAAATAATGGCGTGGTGGATGCCG GGAGTGGATTACGATAGATTAAATCAAGAGGCGCAAGCATTTAGAGGGTGTATTTACCGGTTTAGCCCAATAT ATTCATGCGTATAAAAGCGCTAAATTTTAGAGCAACCTTTCAAGGCCCTTAGATTTTGAAGTTTACCTAA GCACTAGAGACGCTGTGAATTACGGCATGGTTTGAAGCGTCAATGCTTGTATCCAGCATTTAGCCAAAAATCAAAAA TCTATCTTTTGGGGCGGATGCGAAGTATTGAGCGCGTTTACCCCATCTGTTGCAAGGAGCGTTTGGTTTTTG ACGGGATGGAATCGCTCTTAAAAAGCAGGAGTACTAGAAATGCAATGATGCAAAATTTGAGTTTGGGCGATGT TTTAGCCGCTTTGAGCATGTCTTTAGGGCATTTGTGGCATGTGTGGGGGATTGTGAGCGCGTTCAGTCAATAA GATTTTCAAGTTACAGCTTTTCTTACAGCTCAGTGGCATGCTTATATATGTAGGGAG	886	QNYQLFSSAKEDKRLGQKEIFYISVN EENEKALLNCYPNAKNIAGFFHLETDY VGLGIDROMACLAANNVWVDAGSAIT IDLIKEGKHLGGCILPGLAQYIYHAYKSA KILEQPFKALDSLEVLPKSTRDAVN MVLVSVIACIQHLAKNQKIYLCGGDAKYL SAFLPHSVCKERLVFDGMEIALKKAGIL ECK
HP0187	887	AAACCCCTATTGTTAGAGATGTCAATATCGCCACCGCTAGCGAATAGCATGCCCTTTCTTACTAGATGCGC TTAAAAACACCCCTTAGCCGAGTCTTTTACAGATAGATGATGCTAATGAAGAGTGGATCATTTGGATT TAGGGGATTTGATGATCCATCTTTTACAGAGAAATGCCGTAAATAATTTGAGTGGAGGGTTTGAACGCTTATA AAAGAGGCTTCTTATCAAAACGCTAAGAACTCATCGCTTTTAGGGCTAGCGGAGCGGTAAAGCGCTC TTTCTATTGAATTAGCCCAAGAAATGGACGCTGAAATCTTTTCTTTGGATCTTTGAGTATTATAAGACATTAACTC GCTTCGGCTAACCGAGCCTGAAGAGAACGAAATAATCAAGCATACGCCCTGGACCCCTAACATTGATGAAA AAATAACGCTCCTCTTTTAAACTCTTTTAGAGGATGCCATGAGAGTGCTTCTAAAGAGATTTTACTCATTTGGGG GGGAGCAGTTTTTACCTCAATCCATTTAGAGGTTTGAAGCGCTGAGCGGTGAGCGGTGAGGTTGTAA AATAGAGCGAGAAATTGCCACTCTTTCTAACCCCTTATATTTTAAATCCATTGACCCCTAACATGGCTTT	888	TPYLVEDVIAATTLANKHALSLLDALKNT LKPLGEVYQIDESNEEWIILDGLMI HLFTEECRKKFDLEGLNAYKRGLPYQ NA

HP0187	889	GCGAATTCGTGCTTTGAAGTCTTTAGCTTGAATGAAAAGATTTGAAAAATCGCTCTGGTTTGAAGAAATTCT TAATAAAGCTTAAAAATTCGCTATAATAAAATTTCTTTAAACGCGCCATATCCCCACAAAACGCTAGAGAATGATG AAAACGACAGAACATCAATTTAAGGAACCTTAAGAACTTAAGAAATGGAATAATCAGCGATCTTATAGAAATGCAATGCGTATGAAA AAAATTTGCCCTAAGAGATGATTTCAAAAGTGATTAAGGCTGTTGTTAAAAATGGCGCAAAATGAGTTAGACCCCC TAGCACGCTACTTG	890	EFVCFEVSFSLNEKDFEKIALVLEEILNKA
HP0958	891	ATCATTTAATGGCTTTAGAAAAGGAATTGAGCGGATTGCGATAGATATAGCTAAAGAAGTGATCTTAAAGAAGTGG AAGACAACAGCCAAAGTAGCCCTTGCTTTGGCTGAAGAGCTTTTAAAAACGTTTAAAGCGCAACGGATATTCATT TAAAGTCAATCCCTTGATTACCTTATTTAAACGAGCTTTGCAAAACGCTTCTAAATCAAAATGAGAGCAATGA GGCTATTTCTAAGGAGCGGTTATGATCACTAGCTCTAATGGAGCCTTGATGGAAATTAATGAGCGCTTTAAAA CGCTCAAGAAAGCGTGTGGAAATTTTAAGGTGATTTTGCAAAATAAACTTTGATTTAAACCCCTAACGATATT GCAGGCTTGAGTTGGTGTGTCAACGCTACGGAATCGTATTTAGAAAGTGAGCGCTAAATGGGGGCATTTAA GCTCTTTTAGGGCTGTGGAGCTGATTGTGGCATGCTGCTTATTTGATTGCCAAAAAACCCCTTTTCAATTTTG ACACTTCGCACCAAGCTTACGCCCCACAAAGCTTTAAACGGGCGCTTTGAAAGCTTTAGCACTTTAAGGCAATTCAG GGTTGAGCGGCTTTACTAAACCCAGCGAGAGCGCATACGATTTATTCATCGCGGCATAGTCCACTTCGGTGTC TATAGCGGTTGGGTGGCTAAAGCTTTTGTGTTGAACAAGCGCTAGGCATGCCATAGCTTTATTAGCGCATGGGA GCATTAGTGCAGGGATTTTATGAAGCCTTAACGCAACTGGCGATAGGAATACCCCATGATCATGATTTTAAACG ATAATGAATGAGTATCAGCAGCGCTATTGGAGCCTTATCC	892	HMALEKELSAIDIAKEVILKEVEDNS OKVALALAEELLKNVLDATDIHLKVNPL DYPYLNERLQNASIKIKLESNEAISKGG VMITSSNGSLDGNLMERFKTLKESVLE NFKV
HP0958	893	TAAAGTGAAGCCGATAAGGTCAATTAAGGCCACTAAAGAACTAAAGAGACCAAGAAAGCTAAACGACTCAAAAA GAAGCTAAACAGCGCCACAGATCCCTGATCATAAGAACTCAATATGCTCTGTTGATGACACAAAACTCAAGC GCTGTTGATATACGACACCTTGAATGTGAATGACAAAAAGCTTTGGGATTTGGTTGTAATAGCGCTTTGAAAGA CAAAACCTATCTACGCTATGATCTATTGATTACAACTATTTATCCATAGAAAACCCCATTAACAACCAAGA GCAATGGGAACCTATGCGGATTTGATTATCATCAGGCTCATTAGAGCAAGTCAATGGGATTACAACATTTCTAAA GGCTCAACAAACGCAACGCTAAGTTGTGTTAAATAATCAATGAGAACATGCTTATGCCAAGCGACTTTTAAAGA GTGCCAAAAGAAAGCGATCCCTAATGCCACACGCTTGATAAGGGAGCGTCAATGATGAGAAATAGCTTTTGAACA ACAAAGAAAATGATTTCAATTACGCTAACGATGTGATCTGCAGACCCGATGATGAAGTGTGTCGCCCTTAAGAG ATGAGATGGTAGCTATGCCCACTAGCGATAGCGTTACTCAAAAACCCCAATATCATTCCTCTATAGCTTGATAGAC TAAAGAGACAAATAACGCCAATGAGGCCCAACCATCACCTTATGCCACTCAACCGCTCCCGAAAACAGCAAGAG AAG	894	SEADKVIKATKETKETKKEAKRLKKEAK QRQQIPDHKKPQYVSVDDT:KTQALFDI YDTLNVNDKSFQWDFGNSALKDKTYL YAMDLLDYNLYSIENPIIKTRAMGTYA DLIITGSLEQVNGVYNNILKALNKRNAKF VLKINENMPYAQATFLRVPKRSDPNNAH TLDKGASIDENKLFEEQKKMYFNAND VICRPDDEVCSPLRDEMVMAMPTSDSV TQKPNIIAPYSYRLKETNNANEAPSP YATQTAPENSKEK
HP0958	895	GAATGCGGTAGAGTTTACTTGACCCCTAATGGCGATATACCGATCTTAAATCATCTGGCTCTGAATACAAAAT GCTTGATGACAACACCTTAAAGACCAATTCAGATCGCTTATAGGATTAACCGCCCAAACTAAACCCCTCATTCG CATCAGAGTGGTTTACTTAGGGGCAATTAATAATGGAATACAGCTTTTGACCCCATAGACGCCCACTTGC ATGTGCGAGAAACGCACTTTTAAAGCGGTGTAGGATATTCTAGCGAGCCTTTTAGTGCTGAGTGCATGCTCCT AATCTCAGTAAGCCCTTGATTGACACTCAACCCCTTGAATACGAAGAAATTTTAAACCATTTCTCAAACTTCA AGCCTCTAATGAGTTGTATTCAATGATGGCTGACTTTAGAAAGATTGCAATGCGCAAAAGAAAGGCGTCAGGT TTTTAAGCTCTACCCCAAGGATGACCAACGCGCAAAACGCGACTTCGGATTGTTGGTGAAAAAAT TAAAGCCCTTTTGAACCTTAGAAGCTCAATCATTCCTCTCTTCTACTGAAACCTCTCAAAAAATCGCTATG GATATTATCAGCGGTTGAATAATGAGGGGTATTTGAAGAAATATTGAAGAAAGGGCTAGAAATTTAGGGGTAGA GAGCGAAGTTTATGAAAAAGTGCAGGCGTATTAGTTACCTTAATCCCGCTGGCATTTGCTAAAGATGTGAAAG AGAGCTTTTATCCAGTTAGAGAGTAGGGAATTAGACGATAATGAGCTTTATGAAGAAACGCGAAAAATCATTTAA ATTTAGAAAAACACCATGATTTTCTAAGATTTTATGAAAAGGCTTTTAAAGATTTTAAATCCTTTAAAAACCCC CCAGCCATTGAGTTTTAGAAAAAGAAATAGAGTCAATCTGAACTTTTATTGTAAGAGTGGATAATGGAATCATCG TGCGTTTGAATGATGAGAGTACCCGACAAATCAGTTTGAAGAAAAATCGCTTAAAGGATAGCGGCTATTAAAGAAA AATTAAGAGGCTAAAGATTTGATGCGCTAAATTTGAGAAAAAGCCACGATTTATAAAATCGGCTGATGCTTT	896	NAVEFYLHPNGDITDLKIIIGSEYKMLDD NTLKTQIAYKDYPRPKTKTLIRVRY LGGN
HP0958	897	GATATTATCAGCGGTTGAATAATGAGGGGTATTTGAAGAAATATTGAAGAAAGGGCTAGAAATTTAGGGGTAGA GAGCGAAGTTTATGAAAAAGTGCAGGCGTATTAGTTACCTTAATCCCGCTGGCATTTGCTAAAGATGTGAAAG AGAGCTTTTATCCAGTTAGAGAGTAGGGAATTAGACGATAATGAGCTTTATGAAGAAACGCGAAAAATCATTTAA ATTTAGAAAAACACCATGATTTTCTAAGATTTTATGAAAAGGCTTTTAAAGATTTTAAATCCTTTAAAAACCCC CCAGCCATTGAGTTTTAGAAAAAGAAATAGAGTCAATCTGAACTTTTATTGTAAGAGTGGATAATGGAATCATCG TGCGTTTGAATGATGAGAGTACCCGACAAATCAGTTTGAAGAAAAATCGCTTAAAGGATAGCGGCTATTAAAGAAA AATTAAGAGGCTAAAGATTTGATGCGCTAAATTTGAGAAAAAGCCACGATTTATAAAATCGGCTGATGCTTT	898	KSLFETLEAQIIPPLFPTETSQKIAMDIIS GLNNEGYYEENIEERARILGVESEVYE KVRKRFSLNPAGIGAKDVKESFLFQL ESRELDNDELVEETRKILNLEKHHEFS KDFYYEKALKILKSKFNPPAIEFLEKEIE VIPELFIVEVDNGIVRLNDESYPTISLEE NRFKDSGYLKEKLEKAKDLIDALNLRK ATYKIGLML

HP0958	899	TTACGCTTTTGGGGGGGAGAAAAACCAAGAAATTGAAAGCCGCTAAACAAAACTCAATCGGTTAGGGTTAAAAAT CCAAAAAATCATCGCTCAGCACCGAGTCCTTTAAACCATTTAGTCAAAAACCATCAAGCCCATCATGGAAAAAGCTTAAAAA ACGCCACCGAAGAAATCAAAACGCTCTTTAATGCAACAAGAAAGCGTGAAAGACGCTTATAGCGAGTTTATGTTGCTT TAAAGCGTTTGAAAAATCTTAAAGCTCAAAATGTTAGAAATGCAAAAA	900	YAFGGRENQEELKAAKQKLNALGLKS KKIIAQHQSLSHLVKNHQAIMKLNAT EIKRSLMQQESVKDAYSEFMFALKRL KILKAQMLELQK
HP0958	901	TGAAGTGAGGAAATGGCCTTAGAGCAGCGCAAAAGAGTGATGTTGAATACCTTTTGATCAAGAGATTGAACGATA GCCTAGACTGCGCTAAAAAATTTTAAACCTTTTAAACGGCATTAATCCAAAGTGAATTTGATCTTATTCACACCGCA TGAAGGCTCTAAGTTGAACGCCCTAGCTTAGAGAACGCTAGAAATGTTGCGGATTTTAAACTCTAAAGGCTTATT ATGCACCATTAGAGAGTCTAAAGCCTTGATATTGAAGCGCTTGCGGCAGTTGAGGAGAAAAAACTCTCTCAG CAAAATTTGAAAACTTTTTGTGGTGTGCTTTTTCTAATGGGGGTGTTGTTTGTAGTCAAGCGATAATTCAAAAT TTAGGGAATATGGATTAAAAATTAGCACTAAATTTTCTTTCATTAACAATAATTAGATTTTATATTGTAGAAATGAAATC CTAGCCAGTGAGCTAGAAATTTTAAATTTTAAATCAAAAGGAGTCATATGCGCACACCATGAAGAACACACGCGGGCA CCACCACCATCACACACACACACACCATCATGCGGTGAACACACCATCATCAACACACAGCTCTCATC ATGAAGAAAGTTGTGACGACTAGCGACAGTCATCATAGAAAGGTTGCTGCCACGGGCATCACGAGT	902	EVKWPLEQRKRVMEFYLLIKDLNDSL DCAKLLKLLNGIKSKVNLILFNPHEGS KFERPSLENARMFADFLNSKGLLCTIR ESKALDIEAACGQLREKLSQOI
HP0958	903	CCAAAAAGTGGAATGAACCATCAAGTCTATGACATTGAAACCATGCTCGCTGATAGCGCTTTTAGAGAGCATGAAG AAGAGCAAGATTCCTCTCTAATACCGCTTTGCCCTGAAGATAAAACAGCGATTGAAGCCAAAGAGCAAGCAAAAA GAAAAAGAAAAACGCTGGTATGAGCTTTTAAAGAAACCAAGCCCAAAAGCTCTATGGGAGAGTTTGTGTTTGAT CAAAAGAAATCGTATTTATGGCAAAGGCTATTGCAACCGGTATTTGCCAGCTATGTATGCGAGGGCGATAGGCA CATTGGATTGAAGATAGCGGATTC	904	QKVENHQVYDIETMLADSAFREHEE EQDSSLNTALPEDKTAIEAKEQEKEK RKRWYELFKKPKPKSSMGEFVFDQK ENRHYGKGYCNRYFASYVWQGDRIHI EDSGI
HP0067	905	GCACTCTTTGGGCTAGAACTTACATCCAGCAAAAAAGGTTACCAATAAGAAAGCGCTTTAGAAATATTAAAAAGC CAATCTCTAGCCAGTTCCTTTACACGGAAATGCTGAGCTTGAATTAACCTATGAAGCGCCCTCCAAACAGATTT AAAAAGATCTTAGGGTTGAAGAAATCATTTATGCTATCCACAGCCCATGGAATTAACGATTAGCCAAATCAAAAGCT GGCAATCGTTTCATTAACCTTACAAAGCCATGAACGAATTAGACATGGCGAAATTTTAAACGCTTACGCTCAAAA AACCAAGATCCACCCATGCCACTAGCTATGGCTTTTGGGCAAGTTTGGGATTTGAATGAAAAAGGCTTTAA GGCATTATCTTATGCGCAAACTTCTAAGATGGTGATCAACTGCGTTTAAAGCGTCCCTTTATCTCAAAACGACGGGC AAAAATCTTATGAGCTTGCAAGGCCCTTTTAAACGCTCATAGAAAAACCCCTAGAACTAGACGAAAGCCACCTGT GCACGGCAAGCGTTCAAAACGACATTAAAGCGAT	906	HSFGLETYIQKKVTKNESALEYKAN LSSQFLYTEMLSLKLTYESALQQDLKKI LGVEEVIMLSTSPMELRLANQKLGNRFI KTLQAMNELDMGEFFNAYAQTKOPT HATSYGVFAASLGLIELKKALRHYLYAQ TSNMVINCVKSVPLSQNDGQKILLSLQ SPFNQIJEKTLEDESHLCTASVQNDIK A
HP0145	907	TCACCTTACATGAGGACCGATAGCTTGAATATCGCTAAAGAGGCTTTAGAAAGCGGAGGAATAAGATTTTAAAAAGACT ATGGCAAAGACTATTTACCCCTAAAGCCAAAGTCTATTCAGCAAGAATAAAAAAGCCCAAGAGCCCATGAAGCGG ATCAGGCCACCTCTATTATTTAGAGCCAAACGCTTTTAAAGACTACCTTAAAGCTGAAGAAATTAAGGCTCTATACC TTAATTTACAAACGCTTTTAGCTTCTCAATGCAAGACGCTCTTTTGAAGCCAAAGCGTGTTGTGGCTTGCGAA AAAGCGAGTTTAAAGCGAGTGGGAGAAAGCTCTTTTGTAGTGGCTATTATAAAATTTTAGCAATGACGATAAGGA CAAAATGCTCCCAATTTGAAGAAAAATGACCCCATTAATTAAGAAAACTAGAGAGCAACGCCCATGTTACAGAAACC TCCAGCACGCTATTCTGAAGCGAGCTTGATTAAAGTTTAGAAAGTTTAGGCATAGGCGGCCAGCACCTACGCCCC CAACGATTTCCCTTTTACAAACAGAGACTACATCAAGGTAGAAAAAAGCAAAATCAGTGCTTTAGAGAGCGCTTTTA AGGTGATAGAAATTTAGAAAAAGCATTTTGAAGAAATCGTGATTCAAATTCAGCGCTCTTTAGAAAGAAATTTGG ACAATATCGCTCAAAATAAGCCGACTACCAGCAAGCTTAAAGGACTTTTACTACCCCTTTATGGATAAAATTTGAAG CTGGAAAAAAGATATCATCTCTCAAAAAGTGATGAAAAACCGGTCAATCATGCCCTAAATGCGGTGGGGAATTA GTCAAAAAAATAGCCGTTATGGGAGTTTATCGCTTGCAACAATACCCCTAAATGCAAAATATGTCAAACAAACTGAA AGCGCTAATGATGAAGCCGATCAAGAAATGTGCGAAAAATGCGGAGGGGAAATGGTGCAAAAAATTCAGCAGAAACG GGGCGTTTTTAGCTTG	908	TYMRTDSLNIKEALEEARNKILKDYGK DYLPPKAKVYSSKNKNAQEAHEAIRPT SIILEPNALKDYLKPEELRLYTLIYKRFL ASQMDALFESQSVVACEKEGFEKAS GRKLLFDGYYKILGNDDDKDLLPNLKE NDPIKLEKLESNAHVTEPPARYSEASLI KVLESIGIRPSTYAPTISLLQNRDYIK VEKKQISALESFAKVEILEKHFEEIVDS KFSASLEELDNIAQNKADYQQVLKDF YYPFMDKIEAGKKNISQKVHEKTGQS CPKCGGELVKNSRYGEFIACNNYPK CKYVKQTESANDEADQELCEKCGGEM VQKFSRNGAFLACNNYPECKNTKSLK NTPNAKETIEGVKCEPCEGGDIALKRSK KGSFYGCNNYPKCNFLSNHHPINKRC EKCHYLMSEIRIYRKKAHECIKERV FLEEDNG

HP0145	909	CAAAAACGGCCCTATAAATTGGATAATACCCCTATTGAAGAAAATTGCGCATGTTATGCTTGCAAACGGCTATTCTAA AGCCTATTGACCACTTATTAGGGCTAAGAACTCACTTACGCTCGTTTGCCAGCTTGCAAAATTTGCATTTTAT TTAGAGCTGGTGAAGACGCCAGAACCGCATTTTAGAAAAGCGGTTTTAGTTTTTAAAGAAATTTTGGAGAA TACAACTCCCGCTCTCATGATGATGAATGCAAAATACATAAAAGCGTTTTTACCATCAATAAAAGTTTTCTTAA AAATAAGGCTTAGTTTTTAATTTTATTAAACAAACCCCTATCTTGATAAATCTCAGGCTGGTGCTTTTAAAC GC	910	KNAPYKLDNTPIEENCAC/ACKRYSKA YLHHLFRAKELTYARLASI.HNLHFYLEL VKNARNAILKRFSLFKKEFLEKYNRS H
HP0145	911	CTTGATGTTAAATGGCTGATGAAACGCTACCCACAGAGCGCAACCGGTTATTAGAGATGATTTCTCAGCCTGAAA GCGGCGTGATGAATTTTTTAAGCGTGGTGATTAACCTCTATAAAACGATGACAATATTGACCATGAATCTATGAAT TGCAAGAAATCCTAACCAATCCAAATCAAGCCATGGAAGATTTTTCTAAACCTTTTAAAGCCTTTTCAATACCC TTCTAACTCCCAAAACGCAACCCCTAAACCTTGCGCTCTTAAACGCTTATGCGAAGCATTTAGACGTGCA ATCGCTTCTAAAGCGCTAAGCTCTATTAGAAAATGGGCAAAATCATGATCTGCTTTTGTATGATGGA GGCTATTAGGAAATTTATCAGCAGCATGATTTCCCTACCGCTTCTGCGTATAATCTGGCTAGCCAAAGCCAAAT GGGCTTCTGCTCATTTTTCGGAAGAGATGCGTATTGAATATCTTGATGCTAAAGAAATTTAGACAAACAAACCTT GAAATCATCAACTCCGTCATGAAATTTGGAATTTGGAATTTGAAAGCCCTTTTATGAGGCTGATTTTCTCGC AATGAATGGTTAATGAATTTTGGCATGGAAATGAAAGCCCTTTTATGAGTCTTTTCAAAATACGCC ATCAACGGAAGCGATCATTTTTTCAATAAAATCCATTTAAAGCCCTTTTATGAGTCTTTTCAAAATACGCC CCCTTTTAGAAGTCAATGAAGTAAAGCGGCTTACTCCAGTGGCGCATTTACGCTATTAGGATGATTTAGGGGG GATTTTTAATCGTGATCTTTTGGGCTTTTACGCTTTTGAATTTAAGCTTAAAGCTTCAAAAGTTTATAAAG AGATAATGACAAACCCCTTATTTTACCTCAATCGCGTAAATGGCTATGGGGAAGAAACACGCAAGCTCT AGGGCTT	912	LYVKWLMKRYPTERNRLI.EMISQPES GVMNFLSWHYLYKNDDNDHEIYELQ EILTSKIPKWKDFSKNLLSLFQYPSNS PKTPNPPTKALFNAYAKHLDVQSLLK SAKLYLEKMGQKIDLPFCYDGGYGGKI ISTHDFLTASAYNLALAKANGVSLIFCE EDAYLNILHAKEVDNPNIEINSVNEKL KKYQLVYEKGEVVEVYLYNEVNEFLAW ELKSPDFAFLGAEFSTRKSDHFFNKIH LKAPHFLESFQNYAPLLEVEVSGLLQ CAHLRYLGIDLGADFLIV-SLGLFHAFE NLSLKASKVYKRDNDNTFTLFLPQIAL MAMGEKNTQALGLDAHYYHKVTFI
HP0145	913	CGCGGGACTAACATTATCGCCCTCCAGAGGGGTTATAAGGATAAACCTAAGGATAAACCTAGTAACACACCG CAAAATAATGCTAACAAACCAACAAACAGCGCTCAAAACAATAGTAACACTCAGGTTATTACCCACCAATAGC GCGCAAAACAGAAATCAACCCACGCAAGTCAATGATGGCCCTTTTGTGGTGCAAGACACGCTTGTCAATAT TGATCGCATCAACACTAACGCTGATGCGCAGGATTAAGTGGAGGATTAAGCTTCTCTACCAACCAATGCGGCTC ATTGCGATATCGCAAGCGGCTATCAATCTGCTCAATCAAGCGAGCGGCGCACCTTTTAGTGGAATCTAACC GGGAATATCACCGTTGATGGGCTTTAAGAGTGAATAATCAAGTGGGTTATGCTTTGGCAGGATCAAGCGCGAA TTTTGAGTTAAGGCTGGTACGATACCAAAACGGCAGCCACTTTAATACGATATTAGTTGGGAAGATTTGT GAATTTAAAGTGATGCTACAGCTAATTTTAAAGTATTGATAGTGGTGGTTTCAACACCTTAGATTTT AGTGGGTTACAGGTAAGTCAATATCAACAGCTCATTACGGCTCCACTAATGTGCGGCTTAAACCTTCAACAT AATGAATGTTGTTAAGACCAATGGGCTGAGTGTGGGGAATACACTCATTATAGCAAGATATAGCAGTCAATC GCGCATCAATACCGTGGTTTGGAACTGGCACTAGGTCAATCTTTCTGGGGTGTCAAATTTAAAGCGGTGAAA AACTGGTTATAGATGAGTTTACTATAGCCCTTGGAAATTTTACGCTAGGAATATTAAATGTTGAAATCACCGAG AAATTCGCTTCTTCAACCCCAAGAAACCCCTTGGGCGACATCAAGGCTTATGTTAATAATCTAACCCCTGGGTCAAAA TGCGGTCATGGACTA	914	AGLNIAPPEGGYKDKPKDKPSNTTQN NANNQNSAQNNSTGCVINPPNSAQ KTEIPTQVIDGPFAGGKIDTVNIDRIN TNADGTIKVGGYKASLTINAHLHIGK GGINLSQAAGSRTLLVENLTGNITVDG PLRVNNQVGGYALAGSSANFEFKAGT DTKNGTATFNNDISLGRFVNLKVDAHT ANFKGIDTNGGFGNTLDFSGVTGKVINI NKLITASTNVAVKNFNINELVVKTNVGS VGEYTHFSEDIGSQSRINIVRLETGTR SIFSGGVKFKSGEKLVIDEFYSPWNY FDARNIKNVEITRKFASSTPENPWGTS KLMFNNTLGGQNAVMDY:SQFSNLTQGG DFINNQGNTINYLVRGGQVATLNVGNAA AMFFSNVND
HP0145	915	ATTGTTAGAAATTATCGCATTAGGACAATTAGGCAATTAAGGATAAACCTAAGGATAAACCTAGTAACACCG AAATTACCGGACTGATCCCAATATCCCTGAAGCGTTATACCTATGTCGCAAGCTTTAGACGAGAACACCAATACAA ACAGGCCATGCGTTATTACAAACGCAATCTTTAGAAATACAAAGCTCGCTACGCTCCTTTAGCCCAATGCGTTT AGCCATTGAAGCGGCTGAAGGCTCTGATTTGAGCAACGCTAACATGCTTTTAAAGAGCTTTTCTAACGCCAAAGA CAAGAGAGTGGAGTGAATCGCGCTTAATTTGGGCTGAAGCAGAGATAACTCAAAATTTTAAACGCTAAATA CCTCATTGATAAGGTGGTCCAATCCAACCTGATTATTTCTACGCTAGCAATCAGCCCTAGACTTGTCTCAAGTT ATTGAAAACCAACAGATGAATGCAAGCGGATGAGATCGCTCCTCAATCAAGATGATGATCTGAAAG CTAAAGAGCAAGCGCTTATGATTTAGGAGCGTTGATGCAAGGATCAAGGACTTTAAACGCGCCACTTTTACATC TGCAATATTGCAAGGACCATGCGGAACGATAAAGCTTCTGCTTAGGCGCGGATGAAAGAGCCCTTTTCTCC ATGGAGGGGAACACGCAAGAAATCGCCCACTATGACAAATCATTCAAATTTCCCTAATCTAATGAAG	916	ILLEIALGQLGIKKSLLIDIGTQWIKNYPT DPNIPEALYYVAKALDENNVHYKQAMRY YKRILLEYKNSRYAPLAQIMRLAIEAAEG SDLSNANMLFKEAFSNAKDKESASEIA LNWAEAEINYQNFNNNAKYLIDKVVQSN PDYISTHESALDILLKLLKNQMNASAI EIAHLLNQDDDLKAKEQALYDLGALY ARIKDFKNAHLNLYQLQDHAELDKAS VVRARDEKALFSMEGNTJEKIAHYDKII QNFPNSNE

HP0620	917	CGCTGATCTTTGCGGTGGTGAATGAATATCAAGCATCTAATATCAAGTATGAATGGATAAAGAAAGCGGGGCTTTAATGGTGATAGGGTGCTTTATGGGCGCAAAATACCCCGCAAAATATGGCTTTGTGCTAACACCTTTAGGATCTGATGGCGACCCGTAGATGCACTGGTTTAAAGCGATGTGCTTTCAAGCCGGAAGCGTAGTGAAAGCGCGCTTGTTGGGGTTTGAACATGGAAGATGAAGCGGATGGATGAAGAACTAATCGCTCTGCCCATAGATAAGATCGATCCACGCAATTCCTATGTCAAGATATTGATGATTTATCCAAACACACTTTAGATAAATCAAGCAATTTTGTGAACCTTACAAGGATTTAGAGCCTAATAATGGTGAAAGTCAAGGGTTTGAAGCAAGAGAGTGGATTAAGGTTTAGAGAAA GCGATAAAGCCTATCAAGGCTAAAGATTTAAGGGTTTGGCTCAATAGCTTAACCCCTTTTAAACGCTCTTTTAAAGGCTTTGTTCTCATTTGGGTGGTGA	918	ADSLCVVIEISKHSNIKIELDKESGALM VDRVLYGAQNPYPANYGFVPNTLGS DPVDALVLSDAFAQAGSVVKARLVGL NMEDESGMDEKLIAPIDKIDPTHSYVK DIDLSKHTLDKIKHFFETYKDLEPNKW VKVGFENKESAIKVLEKAIKAYQG
HP0620	919	AGGGATTAAAAAGGTGTTCAAGACAGCAAAAAAGACGCTTGGGTTCACTATGAGATCAGCGAGTTTCATGAAA GCCTATACCGCATTTGCTAAAAAAGACAGCGATACGCTATTTATGAGGTATCTCCCTCTAGGTATTTGGCCAGC ATTTAACGACTGCCCTTATGTCAATACCTGATTTGACGCTTGAAAAAGCTTTGGTGCTTATTATACCAAA CTTGATTGCAAGGACGATCAGCGCATCAAGCAACAGTATCAACATTATCAAAACGTTAAAGCAATAAG AGCGTTGAAACCATCAAGAGCTTATATTGAATAGCATCGACTCTTATAACACCTTTGATCAATACCTCTATAACTTAT GGGATAGCTCTTCTGTTTATCATAGCAATGGGTGCTGCTTAGCCCTAGCTAATTTATTCATGGCAGATGAAG AGAAACCCCATTTATCGCTATGGATGCGCAACCCCAAGTGGAGCATATTTGCCACAACGCCCAAAAGAGGCAGT CAATGGAACGCGGATTTGACAAAGAAAAGAGAAAGTGGTAAATATCGCAATTTAACCTTTTAAAGCGT AAAAAGAACGCGCATGCTTTAAACGGGATTTGATGAAAAGAAAATTTATGGAGGCAAGACACGAGCAAAAGT GATTAGCTGTTATGACATCACTAAAGATTTGATAGCAATATAGGAATGGAATGAGAAGTCCCTCCAAGAGCGATA CAATCTTTGTATAACACTATCACGCTGTTTACACATAGAGGGCAAGAGATGATTTGAAGATGATTTGATCT CGTCCAGCCAGGAGAAAGATGGAATTCCTATGGACTAATGGAATTTGTTCAAGTGGTGAATGGGAAGT ATGAAGAAATTAAGAGACATCAAGTGTCAATAACGCTCAAGAGCTTTTAAACAGGCTAGCACTATTTTAAACCA CTCTTAATGAAGCATGCCCATGTTGAGTAATGGTGTGAGGCAATGTGCCGCTGCAATAGTTTATGGGCCGG AATAGATAAAGGCGACGGGAGCGCATCGGGATTTTAAAAA	920	GLKKVFKDSKDACGFIYEISEFMKAYT ALLKKQDRYVYLLRYLPSRYWASILT LYVKYPDFDALKKLLVSYYYQTWIAAG TITRIKQTSINIKNVKNKSVETIKELILN SIDSYNFTDQYLYNLWDSSSVYHSHKW VRPVLALANYFMADEEKPHFIAMDAET QVEHILPQTPKRGSQWNADFDEKRE EWNVNIANLTLLKRKKNAHALNGDFDE KRKIYGGKDTSKVISCYDITKELYSNYR KWNEKSLQERYKSLYNTTTPVLHIEGQ EDDFEDDFD
HP0595	921	CGTCCAGCCAGGAGAAAGATGGAATTCCTATGGACTAATGGAATTTGTTCAAGTGGTGAATGGGAAGT ATGAAGAAATTAAGAGACATCAAGTGTCAATAACGCTCAAGAGCTTTTAAACAGGCTAGCACTATTTTAAACCA CTCTTAATGAAGCATGCCCATGTTGAGTAATGGTGTGAGGCAATGTGCCGCTGCAATAGTTTATGGGCCGG AATAGATAAAGGCGACGGGAGCGCATCGGGATTTTAAAAA	922	VQPGERWKFPWTNGKFVSVKWVNGK YEEIKEDIKVSNNAQELLKQASTILTLN EACPWLSNGGAGNVAGNSLWAGID KGDGSACGIFK
HP0595	923	AGCATCAGGCTGAAAAATCAGAGAGATTTTGAAGAGCTTGAAAAATCCTTACCCAGGCATGTTTTGACGATG AAAAAACGGCTAAATGTTCAAAGTGAATTAAGAGCGAGCGCCTTGCGGTATGCCATTAGCGCTTTAAAAAGC TAGGGGTTTGATAAATTTGCAAAATTAGACAAGCCCATTTATACGGGTGTTGATTTGGGGCGGACGACGGA TTTTGACTTTGGCAATGGGAAAAAGCGCTAATCCTAATTCGCTTACAAAATGACGCAATTTTAGCAATGGAGGGA TAAGTATTTAGCGGTGAAAATTTATGGAATTTG	924	HQAEKIRESEFEKGLKSLPRHVFDEK TAKMFKVELKASEPCAYASALKSYGF DKFAKLDKPIYGVDFDGGGTTDFDGF KWEKSANPKFAYKMTTHFSNGGDKYL GENLELL
HP0595	925	CGAGCCTTTGAAATTGAGCGCTTTGCCCTAAAGATAACGATTATGAGCGTTCCGCTTTAGAAATTACAAAACTCTAAA GATTGGAAAAAAGAGAGCTTTTAAATTAATGAATGGAGCGATCACGGATTGAGTTTCAATGAAGACAAAGCGGAT TCTTACCACAGAAAACCAAG	926	EPLKLSALPKONDYERSPLEITKTKIG KKEELFLKNGAITDLSFNEDKAILTEN Q
HP0595	927	GTCTGGTGTCAATGGGATGCAAGGCCCAACCAATCGCTTTGGATATTGAGAGTAATAATATTCGGAATGTGAATACCA C	928	SGVNGMQAHQIALDIESNNIANVNT
HP0595	929	TTACCGCTCTGATTTGGGCGTGAATCTCCCTTAAACCTGAAAAACATCGTGGATACCAAAATGGCAACCGTGTGG GTAAGGATAATGCTAGGATTTCTACGATTGAGCATTTGCTTTCAGCTGTCCATGCGTATGGCATTGACAATCTTAAGA TCTCTGTGGATAACGAAGAAATCCCTATCATGGATGGG	930	YRSDLGVNLPKPENIVDTKMATVLGK DNARISTIEHLLSAVHAYGIDNLIKISVDN EEIPMDG

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HP0181	941	GTTAATTTAATAATTATTTATAGTATGCATCGGTTGAATTAATGAGAAAGGTTATCACAATGAATGGTTATTTGA GAGTAAACCTCTTATTTTAGCGTTGAACGCTTTGACCTTTTGTCTTTAACTCTTTGGTGGCGGAAAGAACAA GCATCACACTTTGCAAAAGTGACAACTGAGCAAAATTCATCCAGCGCGCTTTTCATGGCAAAGCGAAG AGATGCGTAATCCACAAGCTCTGCACGGTGATTTCCACAAGGAACCTCAAAAACCGGGAATTTGAATATTGAA AACGCTTGCAAAACGTGCCAGGATTCAAAATCAGAGACGCTACAGGCACAGCGTGCCTAAATTTCCGTGC GCGGTTTTGGTGGGCGGTAAACGGGCATAGCAATACCAACATGATTTTAGTCAATGGTATCCCCATTTATGGCGC GCCGTATTTCAATATTGAACCTGGGATTTCCCTGTAACTTTCCAGTCAGTAGGATGATGTATTAAGGGG GCACGAGCGTGCAATACGGCCCTAATACTTTTGAGCGGTGGTGAATATCATCACTAAAGAAATCCCTAAAGAGTGG GAAATCAAGCGGCTGAAAGGATCACTTTTGGGGGATCCTCTAATGGGAATTTGTAGATCCCAAGAAAAAGG CAAGCCTTTAGCCCAACTTTAGGAAACCAATGCTGTTAACACITACGGCGAACGGCTGGAATGTTGGGTAAGC ATGTAGGAATTAGCGCTCAAGGCAATTGATTAAACGGGCAAGTTTCAGGCAAAACAGCCCAAGGTCGCAAAA CTACTTGCTTGATGCGGTTTATAAGATTATGCGACCAATACCTTTAAAGCTTATTACCAATATTATCAATACAACCTTT ACCATCCAGGCACCTTTGAGTGCACAAGATTATGCTTATAACCGCTTCATTATGAGCGCCCTGACAAATCAAGATGGA GGCGGAGCCCAAGCGCTT	942	LILIIIFIVCIGLN	AIDEVLKIEFLELALGYQLISLADMKQG GDLLERIRGIRKKIASDYGFMPQIRIR NLQLPPTHYEIKLKGIVIGEGMVPDKF LAMNTGFVNKEIEGPTKEPAFGMDAL WIETKNKEEAIQGYTIIDPSTVIATHSE LVKKYAEDFITKDEVKS
HP1391	943	AGCGATTGATGAAGTGTAAATAATGAATTTTAGAACTGGCTTTAGGCTATCAACTCATCGTCTGCGGACATGAA ACAAAGGGGCGGATTTGTTAGAAAGGATTAGGGGTATTAGAAAAAGATAGCGGAGGATTATGTTTTTATGATGCCCTC AATCCGGATCAGGGATAATTTGACGCTCCCCCAACGCTTATGAATCAAACTTAAAGGCATTGTGATTGGTGAG GGCATGGTGATGCCAGACAAGTTTTAGCCATGAATACCGGTTTTGTGAATAAGAAATTGAAGGCATTCCTACTAAA GAGCCGGCTTTTGGAAATGGACGCTTTATGGATTGAACTAAAAATAAGAAAGCCATTATTCAGGCTATACCAT ATTGATCCAAAGCACCGTTATTGCGACGCACACCGCAATTAGTGAAAAAATACGCTGAAGATTTTATCACTAAAGAT GAAGTGAATCCCT	944		IKMIDVNGLLKELDDALDKVAKKEPES FLKPIISPIEDYQKSVRQIQAQFTDAPKF NEEGAYPQFLSCGLLEIKGKNGASMEF CLPKVYFPFKSLYIEHEKDGQFLREM LMRLLSSAPLVQLEVLVDALSLGGIFN LARLLHKDNDFIYQQRILTESKEIEEAL KHLLEYLKVNLQEKLAGYKDFAHYNEE KKDRPLKALFLSGVDALSQNALYYLE KIMRFGSKNGVLSFVNLESEKNKSTE DLKRYAECFKDRTSFERLKYLNIEVIND HGIQSKHMKDFADKIKAYYEKKKAVKR ELKDLQKDEKFWTESQFKVSVPVGW DINHKEVCFEIGNEQ
HP0061	945	GGATAAAATGATGTGAATGTTTATTAAAGAACTGGATGATGCCCTAGATAAAGTTGTTGCTAAAAAAGAGC CAGAGAGTTTCTCAAGCCGATCATCTCACCATAGAGGACTACCAAGAGTGTCAGGCAAAATTCAGCGCAATTC ACAGACGCGCCAAAGTTCAATGAAGAGGGCGCTTACCACAAATTTTAAAGCTGTGGTTATTGGAAATTAAGGCAA GAATGGCGCTAGCATGGAATTTGCTTGCTAAAGTTTATCCTTCCCGCTTAAAGCTTGTATAGAGCATGAAAA AGACGGGCAGTTTTAAGAGAAATGCTCATGCGCTTGTCTATCCAGTGGCTTTAGTGCAATAGAAAGTATCTTAG TTGATGCGCTAGCCTAGGGGCTTTCAATCTGGCAAGAGGCTTTACATAAGACAAATGACCTTATTTATCCAGC AAAGGATTTTAACTGAAAGCAAGGAATAGAAAGCCCTAAAGCATTGTATGAATATTTAAAGGTTAATTTGCAAG AAAAATTAGCCGTTATAAAGATTTTGGCATTATAATGAAGAAAAAAGACCGCTTGCTTTAAAGCGCTTTTTTT AAGCGGTGATGATGCTTTAAGTCAAAACGCGCTTTATTATCTGGAATAATCATGCGTTTGGCTCTAAAAATGGGT TTTGAGCTTTGTCAATTTGGAGAGTGAAAAAATAATAATCCACAGAAAGATTGAAACGCTATGCGGAGTGTTTTAA AGACAGGACAAAGTTTTGAACGCTTAAATATCTTAAATAGAAAGTGAATGATCATGATCCCAATCTAAGCACAT GAAAGACTTCGCTGATAAAATTAAGCGGTATTACGAGAAAAAGAAAGCAGTTAAAGGGAGTTGAAAGACTTACAAA AGACGAAAAATTTTGAGACTGAAAGCTCTCAGTTTAAAGTGCTGTGCGGTGGGATATTAAACCATAGGAAAG TGTGTTTTGAAAT	946		IKMIDVNGLLKELDDALDKVAKKEPES FLKPIISPIEDYQKSVRQIQAQFTDAPKF NEEGAYPQFLSCGLLEIKGKNGASMEF CLPKVYFPFKSLYIEHEKDGQFLREM LMRLLSSAPLVQLEVLVDALSLGGIFN LARLLHKDNDFIYQQRILTESKEIEEAL KHLLEYLKVNLQEKLAGYKDFAHYNEE KKDRPLKALFLSGVDALSQNALYYLE KIMRFGSKNGVLSFVNLESEKNKSTE DLKRYAECFKDRTSFERLKYLNIEVIND HGIQSKHMKDFADKIKAYYEKKKAVKR ELKDLQKDEKFWTESQFKVSVPVGW DINHKEVCFEIGNEQ
HP0061	947	CTATAAACCCACCGAACAAAAAGGTTTTTAAAGTTTCTTGATAAGATTCTTAAATCTTTAAGATACAGCCATT TCTTTATGCGATAAAACCGCTTGATGGTTATCAAAAGCCAGAAACATGGTATAATCTTTAGCTATTTATCAAAAGTT TAAGATTTGCAAAAATCGTATCTCAAGGGGAATGTGGCTATGGTTCATCAATCAGAGATGGAAATTAATAATTGGT CAAGCAAGCATTAAGAAAGTAAGCGATCCAGCTTATAAGGGGCTAAGATTGCTGTCATCGGTGTTGGAGGTGGG GGTCTAACATGATCAACACTGGTTGAATATGGCGTGATCAAGATGTTACCCCTATTGCGACGAACACTGATGGC CAACATCTCAAAACAATCCCGCTCCGTTAAATCTTTAGGCAAAAGATCCACTGGAGGTTGGCGCTGGGG GATTCCTGATATTGGTAGAAAGCCGCTGAAGAAAGCGCTAATGAAATTAAGAGCGGATTAAAGACGCTAAATTAG TCATTATCTACAGGACTTGGAGGAGGACTGGGACTGGAGCCACCCCTACTATCGTTAAATCGCAAAAGAAAGTG GGAGCGCTCACGATTGCTATCGTTACCAAGCCTTTCAATACGAAGGGAATCAAAAAGAAAGAGGGCTGAAGA	948	IKPTEQKGFKSFDKISKFF	

HP0061	949	AGGTGTTCAAAGACAGCAAAAAGACGCTTGCGGGTTCATCTATGAGATCAGCGAGTTGATGAAAGCCCTATACCGCA TTGCTAAAAAACAAGACCGATACGCTCTATTATTGAGGTATCTCCCTCTAGGTATGGCCAGCATTTTAAACGACT GCCCTTTATGTCAAATACCTGATTTGACGCTTTGAAAGCTTTGGTGCTTATTATACCAAACTTGGATTGCAG GAGGCAGCATCAGCGCATCAAGCAAAACAGTATCAACATTATCAAAACGTTAAAGCAATAAGAGCGTTGAAACC ATCAAGAGCTTATATTGAATAGCATCGACTCTTATAACACCTTTGATCAATACCTCTATAACTTATGGATAGCTCTT CTGTTTATCATAGCAAAATGGGTGCGTCTGCTTAGCCCTAGCTAATTTTTCATGCGAGATGAAGAGAAACCCCAT TTATCGCTATGGATGCCGAAACCCCAAGTGGAGCATATTTGCCACAAACGCCCAAAAGAGCGAGTCAATGGAACGC GGATTTTGACAAAGAAAGAGAGAAATGGTAAATAATATCGCGAATTTAAACCTTTTAAAGCGTAAAGAAACGC GCATGCTTTAAACGGGGATTTTGATGAAAGAAAGAAATTTATGGAGCAAGACACGAGCAAGTATTAGCTGTTA TGACATCACTAAAGAAATTTATAGCAATTATAGGAAGTGAATGAGAGTCCCTCCAAAGAGCGATACAAATCTTTGTA TAACACTATCAGCGCTGTTTACACATAGAGGGGCAAGAGATGATTTGAAGATGATTTGATCTAGATGATTAA GATTGCCAAGCATCAAAACAACAAAGAGTGATCAATGCCTAAAGAGCTATTAAAGATGTCAAGAGAAAGGATTT TTAAAGACTTCTTAAAGAAAGCCAAACAGCACCGCCCTATTGTTTCTATACAGATAATGATTGTGATGGCATGTTAG CTGGCAGCGTTT	950	VFKDSKDACGFIYEISEFMKAYTALLK KQDRYVYLLRYLPSRYWA:SLTTALVY KYPDFDALKLLVSYYYQTWAGGTITR IKQTSINIKNVKSNSKSVETIKELILNSIDS YNTFDQYLYNLWDSSSVYHSHKWVRPV LALANYFMADEEKPHFIAMJAEQVEH ILPQTPKRGSQWNADFQKE:KREEWVN NIANLTLKRKKNAHALNGDFDEKRIY GGKDTSKVISCYDITKELYSNYRKWNE KSLQERYKSLYNTITPVLHIEGQEDDFE DDFDLE
HP1390	951	GCGACAAGTTTATTAGCCGCTTGAGCACTGGTGATGTAGTGAACAAATAGAACTAGAACAAAGAAACAAAAAG ACGAGCAATATAGAGACTAACAAATCAAAATAGAAAGTAAAGCAAAAGAAAGCAATATAGAGACTAATAAT CAAATAAAGTAGAACAAAGCAAAAGACAAAGCAATACACAGAAAGATTGGTTAAAGAACAGAAAGATTGGTT AAAGAACAGAAAGATTGGTTAAAGAACAGAAAGATTGGTTAAAGAACAGAAAGATTGGTTAAAGAACAGAAAGAT TTCAATTAATATGTAGAACAAATTTGCCAAGAAATCATAATCAATCTTTATTGAAAAGAGAGAAATTAAGCTGGTA TTGGTATAGAAAGTAGAGCTGAATGCAAAACCCCTAAACCTGCAAAACCAATCAAAACCCCTATCCAGCCAAACAC CTCCCAACTCTAAACAACCCCGCTCTCAAGAGGATCAAAAGCGAAGCTTATCGCTTATTGCAAAAGAGAGCT AGAAATTTCTGCCCTATTGCAAAAGCTATCGTAAACAGTGGATTTTACAGGCCAAGTCTATCGCTTATTAGAA CTAGATCCTAGAGATTTAAGGTTACAGAAAGTGGCAAAAGAAATCTAAAAATACGCTCTAAAGCTCAAGCTAA ATGCTTGAAATGAGAAACCCACAGCCCACTTTCAAACTCTCAAAAGCTTTTGTGTTCAAAATATTGCTGAT GTTAATAAGAAATAGAAAGCAGTTGCTAATACTGAAAGAAAGCAAGGATCAAAAGCGGTTATGTTATAGTAAAGGATG TAGCGGTTAAACATTGCACCAAGTTTAAATATCTG	952	ATSLLLAACSTGDVSEIELEQEKQKT SNIETNNQIKVEQEKQKTSNIETNNQIK VEQEQQKTSNTQKDLVKEQKDLVKEQ KDLVKEQKDLVKEQKDLVKTQKDFIKY VEQNCQENHNQFFIEKGGIKAGIGIEVE AECKTPAKTNQTPIQPKHLPNSKQP RSQRGSKAQELIAYLQKELE:FLPYSQK AIAQVDFYRPSIIAYLELDPRDFKYTE EWQKENLIRSKAQAKMLEMRNPQAH LSNSQSLLFVQKIFADVKNKEIAVANTE KKAEEKAGYGYSKRM
HP1390	953	ACAAACAAGGTGGGATAGAACTCGCTAATAGTCAATAAAGCAGAAAGACAAAGACAGAAACAGAAACAAA ACAAAGCAATAAGAGTGGATAGAGTTAGAACAGCAAAAGCAAAAGACCAATTAATACACAAAGAGATTGATTAA AGAACAGAAAGATTTCATTAAAGAAACAGAAACAAATGCAAGAAATCATAATCAATCTTTATTAAAAAATTAGGA ATTAAAGGTGGCTTGTATAGAAAGTAGAAGCTGAATGCAAAACCCCTAAACCTGCAAAACCAATCAAAACCCCTAT CCAGCCAAACACCTCCCAAACTCTAAACAACCTCATTTCTCAAGAGGATCAAAAGCGCAAGATTATCGCTTATTT GCAAAAGAGCTAGAAATTTCTGCC	954	TNKSIGIELANSQIKAEQERQKTEQEKQ KANKSAIELEQQKQKTINTQ RDLIKEQK DFIKETEQCNCQENHNQFFIKKLGIKGGI AIEVEAECKTPKPAKTNQTPIQPKHLPN SKQPHSQRSGSKAQEFIAFLQKELEFL
HP1390	955	GGCTTTAATCTGCCATTATACCGCTATTAGGGGGGCTAACGCTCTGACTTTGCCGTGCCGATGCTCAATATCA TCAACGGCGGAACGCATGCGAATAATTCATAGACTTTCAAGAAATACATGATCATGCTTTAGGGTTTGAAAGTTTAA AAGAGCTTTAAGAGCGGAGCGAGAGTCTATCACACGCTTAAACAACTTTTAGATGGGAAGAAATCAGCTCACAAAGC GTGGCGCATGAGGGGGCTTTGCGCCTAATTTTAGCAACAATGTAGAACCCCTTGAAGTCATTTCTCAAGCCATTGA AAAAG	956	ALNPLRYLGGANALTLVPMLNIING GTHANNSIDFQEYMIMPLGFESFKEAL RASAEVYHTLKKLLDGKNQI.TSVGDE GGFAPNFSNNVEPLEVISQAIK
HP1390	957	AGTGTAGTGGATGGGAAAGCAAAATCCCTAAGGTGAGTGGGGTATCGGCCCTTATGATATTGAAAGGAATAACA CCATCCAAATCCAAAGTTTATAGCCGACGCTAAGATTGAATACACGAATTTAGGGCAATTTAGCGGATTCCTCAATAAGA AATTGCTGCTGATGCGATGGAAACCCCAATGCCCTATTAAAGAGAGCAAGCCCTAGCATGAGAGCGATCGCTATTG TTTTAGCCAGAAGTCCAGTAAAGGATCAAGAAATAAATAATTATTGATTTTCAATAACCCCATGCTCGCTTACCC TATTGAGGTGGCGCTAAATTTCAAGCTCTTTGAAAGGTGTTTATCTAGCGATAGCATGGAGTATGTTAATCTGGC TAAAAATTATGGGGGAGTTTTTGAATTTGCGCCCTAAATTTAGCGGACGACAGAGCCACGACTTTAGAGGTGAT GGCCTATCACATGGAAGAAATTAGAATTAAAGATGAAGATTTGCGTGTTGTTGATGGCGCTTACGCGCTTTTACA AGAAAGCATTTAAACAAAGCTTTTGAACCTTTAAACAAACCAAAATACGGATTATGTTTACATGCTCTCCATTT AGCGCTTCCGCCCTATC	958	VLVDGEKQILKVGVRPYDIERNNTIQ SKFLADAKIEYTNLGHLSDSNKKKFAA DAMETQMPY

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HP1390	971	GAATTTAAAAAGCGATCACCCCAACAAATCGCTTATTTTAAAGATAAAGTGCTTTTATTCTCAATGTTTCAGGCA ATGTTTTTTTTCTTTGAAGAGATCCTAAAGATTTAAAGCCATTAAAGAAAGGCTTAAAGAGCAGATTGAGCCTAA CGCTGACCCAAAGCCGTCATGCGTTTTTAAACCTTCAAGCGAGCTTGAATTTAGATGCGTCCCGCAAAACCACTT GCCCGTTTGACACCTTTTAAATCCCAACCGCTTTCAGCGTGCCTGTTTATTACGCTAATCGTTTGGCGATAACCCCT CTCTTTTTCCCAAGAGGATAAAACCTATACACGCTTGAACAAAGCCCTTAATAAGGCTTACTATTCTCTTATGGA GGGTTAGAAAAGCGTTTGAACGCTATATAAAATGCAGAGTGCGTTTAAAGGCATGAAAAGAGATTGCATTTTTTATTTT GTCATTTTGTTCGGTAGGGATT	972	IEFKKAITQIAYFLKDK:SAFILNVSGNV FFSFEENPKOLKAIKERLKTIEPNADP KAVMRFLNLQASLILECVPQTTCPFDTL LIPTAFSVPVVYANRLGDNPSLFSQED KTYHNALIKALNKAYYSLEMEGLEKRLN AIKNAEWL
HP1390	973	TCCAAACAAGCTGAAAAAGAAAATCAAAATCAATTGGTGGAATATTCAAGATTAAACATAGCGACAAGTTATTATTAG CCGCTTGTAGTGTGGTGATATTGATAACAGATAGAGTTAGAACAAAGAAAGAAAGAGCTGAAACGCTAGGGAT AGAGCGAACAAAGAGTGGGATAGAACTGGAACAGGAAACAAAGACCATTAAGAAACAAAGAGATTAGTTAAAAA AGCAGAACAAAATTGCCAAGAAAATCATGGCCAATTCTTTATGAAAAAATTAGGAATTAAGGGTGGCATTGCTATAGA AGTAGAAGCTGAATGCAAAACCCCTAAACCTGCAAAACCAATCAAAACCCCTATCCAGCCAAACACCTCCCCAAT CTAAACAACCCCACTCTCAAGAGGATCAAAAGCGCAAGAGCTTATCGCTTATTTGCAAAAAGAGTTAGAACTCTCTGC CCTATTCAAAAAGCTATCGCTAAACAAGTGAATTTTACAGGCCAAGTCTGTCG	974	SKQAEKENQINWWKY:SGLTATSLLLA ACSVGDIDKQIELEQEKKEAENARDRA NKGIELEQEKQKTIKEQKDLVKKAEQ NCQENHGQFFMKKLGKGGIAIEVEAE CKTPKPAKTNTQPIQPKHLPSKQPHS QRGSKAQELIAYLQKELESPLYSQKAIA KQVNFYRPFSSV
HP1390	975	CGAAGATCAAAAAGCGAAAATCAAAAAGCGGAGAACAAAGATTCTGCTCTCTATCACGCTAACACCTTAAAGA GTATTTAGAGCGCATGGTGTGTTGAAATGACCCCATAGATGAAGAAAATAAATCGGTATCGTCAATGGTTTGGCATG GACTCCAGTGGCGGTGATGTGCTTAAATGAAGTGTCTCAAGATTAGGCAAGGGAGAAATTGAAACTCACCGGG AGTTAGGCGGATGTGATGAAGAATCGCCATTATTGCTTTTCTGTTGCAAGTCTTATTGGATAACGAAACCTTA AAAGTGCCTAAATCCCTAGCGAGACCGATGCAGAGGCAAGAAAAGAAAGTGTGAAAGTTTATAACGCTTA TGATTGCAATTTGCATGTCCTGAGGGGGCTACGCCCTAAAGACGGCCCGGCTGGGATCGCTATGGCAAGCGT GATGGCG	976	EDQKSENQKSENKDFC:VSITPNNLKEY LERMVFEIDPIDEENKIGIVNGLAWTPV GGDVLKIEVLKIRGKGELKLTGSLGDV MKESAIIFSVVKVLLDNETLKVPIKIPSE TDAEGKKKKVVKVYNAYDLHLHVPEG ATPKDGPSAGIAMASVMA
HP1390	977	ATCGTAACGCAGCAAAAATCGCCCTTGTAGATGAAGACAATTCCTCTTCTAGGCAATTAGCCTTCATGGCGCAA AGCTCCAACGAGTTAGAAATCGCTTTTATAGCCCTCTATGCTGGAAGCCAAAAGCTTTTAAAGAAGAAAGAAAT TATGGGATCTTGCACATTCCTCTCATTTTGAAGCCAATATCCATAACAAGTGCCTGTAAACGATAGATTTTATGCGA ATTCCAATTACTT	978	IVTQQKIALVDEDN:SLRQLAFMAQS SNELEIAFFSPSMLKAKLLKEEKY HPSHFENIHKQVPVTIDFYANSNY
HP1390	979	CGCATATTGCAAAAAGCCCTCAAACTCTACGCTCTTTAAAGCCTTTAGAATTGAATGTGAGCATAGCCTCTAGCTT TTCTAAAATAGGGAATTTGTTTGGTAGGGAATTAGAAATCCTTTTGGGTGAAATCCAGCCCAAAACACCCGCTGCTT AAATAGTGAGAACTTTATTTAAAGCTTTTCCAAAAGCGTTATCGCAAGGATTCGCAAGATTTCGTGCTTTGAA GTCCTTAGCTTGAATGAAAAGATTGAAAATCGCTGCTGTTTGAAGAAATCTTAATAAAGCTTAAAAATTCG CTATAATAAATTTCTTTAAACGGCCATATCCCCACAAAACGCTAGAGAATGATAAGAAACGACAGAACATCAAT TTAAAGGAACCTTAAGAATGAAAATCAGCGATCTTATAGAATGCATTGCGTATGAAAAAATTTGCCCTAAAGAGAT GATTTCAAAAGTGATCAAGGCTGTTTGTAAATGCGCAAAATGAGTTAGACCCCTAGCACGCTACTTGGTGG TTGAAGAAAACAGCAGCTCCAGCTTATCCAGTTGGTAGAAGTTTGAAGATGGTGAAGATTGGTTAACGAC CCTTCTAAATACATCAGCCTGTCTAAAGCCAAAGAAATGGATCCAAAGCTTAAGATTAAAGACGAATGTCTATAGC TTGAGTTTGGAGAGCATGAAAACAGGAGCGATCAACCGCTTTTAAAGATTGCAATACCAGTTAGAAAAGCGTTA GAAGACAGCCACTTTGAAGCGTTTCAAAAGCGCTTAAACAGCGTTTAAATGGGGCAAGTGAATTTAGTGATCACA CCAAAACACCTTTATTGAGATTGAGCAGCAATTCAGGGCGTCTTCCATGCCCATCGCATCAAGGCGGAGATT TTAAAGTGGCGGATAGCATTAAAGCGGTTTTAACGCAAGTCAACGCGCACGAAAAGGCTTATTATTAGAGCTGAGC CGCACCCACCCCTA	980	ALLQKALKLYALLKPLE:NVSIASSFSKI GNLFGRELESFVCVKIQPKNTRALNSEK LYLKLFOKGVIAIRISCEFCVCFEVSLE KDFEKIALVLEEILNKA

HP0838	981	CCGATAAGGGATTAAAAAGGTGTTCAAAGACAGCAAAAAAGACGCTTGGGGTTTCATCTATGAGATCAGCGAGTTC ATGAAAGCCTATACCGCATTGCTAAAAAACAAGACCGATACGCTCTATTTATTGAGGTATCTCCCTCTAGGTATTGG GCCAGCATTTTAAACGACTGCCCTTATGTCAAATACCCIGATTTGACGCTTTGAAAAAGCTTTTGGTGCTTATTAT ACCAAACCTTGGATTGCAGGAGCACGATCACGCGCATCAAGCAAAACAGTATCAACATTATCAAAAAAGCTTAAAGC AATAAGAGCGTTGAAACCATCAAGAGCTTATATTGAATAGCATCGACTTTATAACACCTTTGATCAATACCTCTATA ACTTATGGGATAGCTCTTCTGTTTATCATAGCAAAATGGTGCGTCTGTTAGCCCTAGCTAATTATTTCATGGCAG ATGAAGAGAAACCCCATTTTATCGCTATGGATGCCGAAACCCCAAGTGGAGCATATTTGCCACAAACGCCCAAAAGA GGCAGTCAATGGAACGCGGATTTGACAAAGAAAAAGAGAAATGGGTAAATAATATCGGAATTTAACCCCTTTTA AAGCGTAAAAAGAACGCGCATGCTTTAAACGGGATTTGATGAAAAAGAAAAATTTATGGAGGCAAGACACGAG CAAAAGTATTAGCTGTTATGACATCACTAAAGAAATGTATAGCAATTATAGGAAGTGAATGAGAAGTCCCTCCAAGA GCCATACAAATCTTTGTATAACACTATCACGCTGTTTACACATAGAGGGCAAGAGATGATTTGAAGATGATTT TGATCTAGAAATGATTAAAGATTGCCAAGCATCAAAACAACAAGAGGTGATCAATGCCTAAAAAAGAGCTATTAAAGA TGTCAAAGAAAGGATTTTAAAGACTTCTTAAAGAAAGCCAAAGCAGCAGCCCTATTGT	982	DKGLKKVKFSDSKDACCAGFIYEISEFMK AYTALLKKQDRVYVYLLRYLPSRYWASI LTTALYVKYPDFDALKKLLVSYYYQTWI AGGTITRIKQTSINIKNVKSNSKSVETIKE LILNSIDSYNTFDQYLYNLWDSSSVYHS KWVRPVALANYFMADEEKPHFIAMD AETQVEHILPQTPKRGSQWNADFKE KREEWNNIANLTLKRKKNAHALNGD FDEKRIYGGKDTSKVISCYDITKELYS NYRKWNEKSLQERYKSLYNTITPVLHI EGQEDDFEDFDLE
HP1033	983	GATATTGCAGAAACCAATCTATTAGCCCTAAATGCCGCTATTGAGCGCGCGGAGCGATGGGAGAG GGTTTGGGTGGTGATGAGGTGAGAAACTCGCTGAAAAACCCAAAGCCACTAAAGAAATCGCTGTTGT CGTTAAAGCATGCAACAAGAGCGAAGATATTCAACCAATACCCAGCATTTAATCTATTGTAAGCTCTATTAA GGCGGATGTGGAAGAGCTTAAATCCACCGTAAAAATAACATGATTGTTGCCAAGCGGCAAAATACACCATCTACA ATATCAATAACCGGTGTTTGGCGTTTGGCCAAACTTGATCATGTGCTTTAAAAACAATCTTTATGGCATGGTTT TGGTCTCAATTCCTTTGATATTA	984	DIAEQTNLLALNAAIEAARAGEHGRGF AVVADEVKRLAEKTQKATKEIAVWVKS MQQEANDIQTNTHDINSIVSSIKGDVEE LKSTVKNNMIVAQAAKYTIYNNINRVFC GLAKLDHVVFKNLYGMVFGNLNSFDI
HP1033	985	CCACAACCCCATTTAAAAAAGACACGCCCCTTTAAAGATTTACAACTCTTGCTAAAGAGCATGATCTCATTTGATTAT TACAAATTTAGGGATGTGGATTTGTCAACAGAGTGGCTTTGGAAGAAATTTAGCCCTAAACCATCGCTTTTAAAGC TTTAGCGGGATAAATCTTTAACAGTGGCAAGCGGCAATTATTATGGGCAAAAGAACGGTTGAAGCGTTAAA AAACACCCCTTTATAGAGTTTAAAGGTGGGTAAATCACGCTCACCTTGCTTTTTCAGCCTAAAGCATGGAT AAATCATCAAGAAGACATTACAATCCATCGCTTATTGAACCAAACTAAAGACGCATTATTGCAAAAAGCCCTCAAACT CTACGCTCTTTTAAAGCCTTTAGAAATTGAATTGATGATAGCCTCTAGCTTTTCTAAAATAGGGAATTTGTTGGTAGG GAATTAGAAATCCTTTTGGTGAAATCCAGCCCCAAAACACCCGCTTAAATAGTGAGAAACTTTTAAAGCCTTT TCCAAAAGGCGTTATCGCAAGGATTTTCATGCGAATTCGTGCTTTGAAGTCTTAGCTTGAATGAAAAAGATTTTG AAAAATCGCTCTGTTTAAAGAAATCTTAATAAAGCTTAA	986	HNPHEKKTDPFKDLQTLAKEHDLIDYY NLGDVDLSNRVALEELALKPSLLSFSA DKFFNSAQAGIIMGQKERVEALKNHPL YRVLRVGKITLTLLFCSLKAWINHQEDI THALLNQTKDALLQKALKLYALLKPLEL INVSIASSFSGKIGNLFGRELESFCVKIQP KNTRALNSEKLYLKLQKGVIAISCEF VCFEVSLNEKDFEKIALVLEEILNKA
HP1033	987	ATGCTCTATGAAAACCCCTTAAACACCCCTTGATGGGAAAGCTTACTTTTACCAAGATTTGAGTTTAAAAAAAATCCCTAG ATTTTAAAAACGATTTTAAAAACGACACGATTTATCACAATAACCCCTTCTATCTATCGTGATCTGCATGAGCCT TTAATATCTATTGATGATTTGAGGGTTAATATGATGATTTGAGGGTTAATATGATGATTTGAGGGTTAATATGATG ATTTGAGGGTTAATATGATGATTTGAGGGTTAATATGATGATTTGAGGGTTAATATGATGATTTGAGGGTTAATTA TGATGATTTGAGGGTTAATATGATGATTTGAGGGTTAATATGATGATTTGAGGGTTAATATGATGATTTGAGGGTTA AACGCTTCGCCCTTTATAGAACTCTCAAAACACACCTTTTAAATCTATCGCAAGCTTATCAAAAATCCTTACCCT TGCTACGCACCATAGGAGATGGGTAAAGTAAGCGGTATTTTAAAGATTGTTAAGAAATTTGGAGCGCTATTTTAA AATGTGCTAACCGTCTCTTTTGGCGTGGGTTTGGAGCATGTCTCTAAAGCATGGGTGCTTAAAAAATGTTTTG TTTTTAAAGACACGATGCGCCCAAGGATCTCTCTTAGAA	988	MLYENPLNTLDGKAYFYQDLSFKILD FFKTILENDTIYHNNPFIYRDLHEPLSI DDLVRVNYDDLVRVNYDDLVRVNYDDLVR NYDDLVRVNYDDLVRVNYDDLVRVNYDDL RVNYDDLVRVNYDDLVRVNYDRLQNAS PLLELSQNTTFKIYRKAYQKSLPLRTIR RWVKK

HP1033	989	CACTACTTCTCGCATGCCATGCAGAGATCAAGAAACCTCCCTTGAATGTTCTGAACCACTACTTCTCGCATGTT TATAGGCTCCCTAAAAAGCAGGAGAGACTCTTTAGGGTGTGTCAAACACTGCATCCTCATACCACTCAAGAG CCTTGTTGGTAAGACTCTACGACTCTTAAACTCCATCGCTAGCTAGCTAAATACTTAATCCAACTCAAGCTCTTAA AAAGAGCTAGAGCCAAACTTTTAAATCAACGATTTTTCATATCAATCAATAGCGGAATTCGCTTCCCATGGGT AGATTATGATAAGCGGTGTCATATCTTGCCTAAGATCAATCTATTCAGGTAATATTTGTTGATAGAAAAT CCATCATTTCTTGGTTCTTAAATGCCCCCAATCAATGAGCCATAAACCTTGCATTGCTTTCGATTGTTGGGTCA AACGCTAAGCGCTGGAGCGATTTCTACAGGGGAGTCCCAAGGGCTAGATCGCCATTATAAGTTAAGAGCTTG AGTAGTCTTTTAAATCATAATGGTAGGAATGTTGAATGATAAAGTCCAATTCCTTTCGATTGTTGGGTCA GTGTAGAAATGTTTAAACCCCATGCTCAAGCGTCTTGTCTTGTGTTCTTGCATAAACGCTCACTTCAGCC CCCATAGCCACAGCGTATTTAACCGCATGCTTCTAGCCGCCAAACCCAGCAGCCCACTTTTGTGCTTTAGT AACCTTAGAAAATTTAAGGGCAATAAGTGGTATGCCCGCACAAAGCAAGGGGCTACTTTTCTAAAGGAGCGT TTTTATCCACGCTAATCACATAGTTTTCATCCACTACAATATTATAGAGTATCCGCCCATGTGGGTTCTGTTGTCATG GAAATAATCCAAACAATCGTAAGTGAATACCACTTTGGCGCAAAATTGCTCTTGTGTTCTTTACAGGGCTTACACGC TTTGCATGAAT	990	HYFSAHAAEIKENSLEMFNLNHYFSHVY RLPKKARKRLFRVFKHCLJPLKSLVG KTLRLKLHALAKKILQLKLLKS
HP1033	991	CCCAACGCTTATTTAGACATGCTCTATGAAACCCCTTTAAACACCCCTTGATGGAAAGCTTACTTTTACCAAGATTG AGTTTAAATAATCCTAGATTTTAAACGATTTTAGAAACGATACGATTTATCACAAATCTCAACATCTTTCAT GTGGAGTACGATCTGCATAAGCCGTTAGTATCCATTGATGTTGAGGTTAATTATGATGATTGAGGTTAATTA TGACCGGCTTTTACAAAACGCTTGCCTTTATTAGAACTCTCAAAACACCACTTTTAAATCTATCGCAAAGCTTAT CAAAAATCCTTGGCTTGTGCGCGGTGAGAAAGTTGTTAAATAATGGTTTGTAAATTTGGGGTAATCAAAAC CCCTTGCGCTATCATCGCAGACGCTACTTTTCTAAACCCAGCGATATTGGCCCTAATACAAAATTAGTAGGCTCTT AAACTCTTTAGCGGTTGAGAGACATTTCTATAATCTCTTTCATAATATGTCGCAATTTGGCATCCACCACTTCAAA CTCCAAGGTGCATGCTTGGCTTTGTGCTTCAAGCCGCTACGCTACCCGCCAGCATTAGCCGCTTGC CTATACCATAGAATCTTAGCTGCAAAACAAATCAATCGCTTCAATGCTTGAAGGCTGTTGCCCCCTTCAGCCA CGCATTTACACCCATTAGAAAGGAGGTTTGGCTTAACACGCTCAATTCATTGCTGAGGCTGTTGCCCCCTTCAGCCA GCAAAACAAGGCACATGCCACACGCTTCCCTTGGGTAAATTTCTGTTGGGTGATTCGCGCTCTTTT TTCTAAAGCGTATCTTGTATCTCCACGACGCTTCTTAAATTTCTTCAAAAGCTCTAAATCAATGCCGCTCTT TCATAAATCATGCCATTAGAATCGCTCGCGTTACCGGTTAGCTCTATTGAAGCAATTTTCAATGGTATAAATTG CGACATT	992	PNAYLDMLYENPLNTLDGKAYFYQDLS FKKILDFFKLTILENDTIYHKFSTSMWE YDLHKPLVSIDDLRVNYDDL RVNYDRL LQNASPLLELSQNTTTFKIYRIKAYQKSLP LLRAVRKLVKKLGL
HP0064	993	GTTATGGCGAGTTTGAAGAAAGAAAGAGGCTTTATGGTAGATGAGCAAAACCCCTTATCCGGAAGAAGTCCGG TTTAATGAGTTGCGTTAGCGGAATTTGAGAGCGTTTTAGCGCCATTGTCCTTAGAGGATTTAGATAAACCTGCA TGCCTCATCATGCTTAAAGGCTTTAGAGCCACGCTTAAATAAGGATTTGGCTTTGATCGCAGAGAATTGGA ACAGATCGCAAGGTTTATCTAAGGGTATTTGTGCTATTTGACGCGAATGTTTAGGGAATGTGGCGTTGG TGAGAGAAGAGTTATTATAGGCTGAACACACAGAAAGGATCTTACTATGAA	994	YGEFLEKEGFMVDEQNPVPEEVRF NELRLAEFESVFSAINPLEDLDPACAH HALKALEATLKNRDLGDFDATELEQIAK GFIPKGYLWHFDANVLGNVALVREELL LGVKHTKGYLLWK
HP1032	995	TAGAAGATGCGGCACGCTTTAGAAATTGAGGGAATAATTCGTTGTTTTAGAGCCAAAGGATATTGTTAAACCT ATGAAATGAAGATTTAAAGAGCGTTGTTAGCGCTTTTAAACGCTCAACAGCATGGATTTCAAGCGTATAAGG ATTTTGAAGTTTAAAGAAAGAGCCATGCGATTAAAGCAGCTTAAAGGTAAGGATTTTCAACCTTTGCGCATCC TTTTAACCGGGAACCTGCGTGAATTGCCCTTGATTTCCCTATATCCAAAGCC	996	EECGTLELREKISLFLPEKDIVKTYEN EDFKERCLALFNALTSMDFQAYKDFES FKKEAMRLSQLKGKDFKPLRILLTGN SHGVELPLIFPIYIQS
HP1032	997	GCCCCAAATCGTAGCTAAAGATTTTTAGAAAGATTAGGTTATAAGCATGAAAGAAATCGTTACAATAGAGAATG TGCTCTTTAACTACCAATCGCGCTGTTTTAAGGATTTTAAATTAAGCATCAAGAAAGGTGATTTTTATCGGTTTTA GGGAGAGTGGAGGGTAAAGCAGCGCTTTAGCGTTGATTTAGGGCTTTTAAACCCAGTTTGGGAGCGTTA AAATCTTTAATGAGACCTTTCAACAAACGCTTTTACGCCAAATAAGGCTATATCGCTCAAGCA CAAGAAAGCGATTGAAATAACCAAGTATAAAATCAACTTGCATGAGACTTCTACAAAATGGCAAGGATTTATTGGG GATAAGCTAGGGGTTAAGGGCTTCATTTCTAGGGGTTTATCTTGTGCTGATTTTGCATTAATAATTTAGTT TCTCTGTGTTTTAAATGA	998	PQIVAKDFLERLGL
HP1032	999		1000	KKAENNQYKINLHETSHKMAKDLLGIS

HP1032	1001	CCACATTTATGAAAAAGAGTGATGCTAGGGAGCTTAAGCATGGTGTGGAGAAATTAACCGCTGATATTCCTGATG TGAAGAAGAGCGCTCGCTCATCTTATGATGAAAGCGGATCGTTAAGTCGGTACTTATGTGAGCGCTGGCATGATT TTGGTGGGCAAACTTCTCTAAAGCGGAGATTAAAGCACGCTGAAGAGCGGCTTTTAAAGGGCTATTTTGGGGA TAAAGCCGGGCGATGTGTCAATAAGAGTTTGTATTGCCCTCCAGTTTGAAGGCACGGTGATGATGTGAAAGTCT TCACTAAAAAGGCTATGAGAAAGACGCGGAGTTTGTAGCGGTA	1002	HIYEKVDARELKHGVEEFTADIPDVKE EALAHDESGIVKVGTVVSAGMILVGK TSPKGEIKSTPEERLLRAIFGDKAGHV NKSLYCPPSLEGTVIDVKVFTKGYEK DARVLSA
HP1032	1003	TTATAAGCCCTACACCCCAAGCAGCGCTTCATGTGCGTGTGGACTCTAAGACATTACCGCAAAAGCAGTGTC AAGGCTTACTCACTAAGCTTAAGCAACAGCAGGAGAAACAATAACGGCGCATCACAGCCGCCACAAGAGAG AGGGCTAAAAAATCTATCGCATATTGATTCAAGCGCAATAATAACAATTAAGGGAAGTGGCTGCGATTGA GTATGATCCTTACAGAAATGCGCGCATCGCTTGTAGTCTATCTGATGGGACAAACGCTATATTTACAGCCAA GCGGTTGAAAGTGGGCGATAGCGTTATCGCTGCTGAAGCGGTTTGATATTAAAGTGGGCTTTCGATGAAGTT AAAAATATCCCATAGGAACGGTGTGCATAATATTGAATGCATCCAGGGGCTGGCGGCAATTAGCCAGAAGC GCAGGAATGAGCGCTCAATCATGGGTAGAGAAATAAATACACCATATTAGGATGCCAAGCTCTGAAATGCCCTA CATTCTAAGCGAATGTATGGCGAGTGTGGCGTGTAGGGAATGAGGATTTATCAATGTCTCTATCGGTAAGGCAG GGCGTAACCGCCACAGAGGGATCCGCCACAACTCGTGTAGCGCGATGAACCCAGTGGATCACCCCGCATGGTG GGGTGA	1004	YKPYTPSRFRMSVLDKSDITAKSSVKG LLTKLKATAGNNNGRITSRHKERGAK KLYRIIDFKRNKYNIEGKVAIEYDPR NARIALVVPDGDKRYILQPSGLKVG SVIAAEGGLDIKVGFAAMKLKNIPIGT HNIEMHPGAGGQLARSAGMSAQIMGR ENKYTIIRMPSSSEMRYILSECMAVGV VGNEDFINVSIGKAGRNHRHRGIRPQTR GSAMNPVDHPHGGG
HP0062	1005	TTTGTAGGGCATTTAGAACGCTTTAAAGAGTTACTAAGAGAGGAAGTGAACAGCTTGAGTAATCATTTCCATAATTTA GAATCATGGCGAGACGCTAGGAGGGGATAAATTTAGCGAGGTGCTGGATAATTTGAAAAGCACATTTCAATGAATTTGA TGAAGCTGCGCAAGAGCA	1006	FVGHLEFKEKLLREEVNSLSNHFHLE SWRDARRDKFSEVLDNLKSTFNEFDE AAQE
HP0062	1007	TGATGAAAACACCACGAAATATTCCCTTTGGACTGACAGCGACGATAGCGTAGTGGTTTGACGCTCATATACG CTAAATTAAAGGATCGTGAACGCTTATGAACTGGTCTTAAATCAACGCTTTAGCGTGGGATAAGGATTTGA GAGCCAAATTGATGTGGTGATCGCAACGATGAATCTCGAAGTGGCGTGGATCAATTTGTTGTGGAAAC GCCCGCTTGATTATGGAAGAGATTAAAGGGATTCCACCTCAATAAACTTCAATGGATAAA	1008	DENTTKFLWILTATIALVLTLYAKLRI VKRIDELVLKINAFSRGDKDLRAKIDVG DRNDEISQVGRGINLFVENARLIMEEIK GISTLNKTSMDK
HP0062	1009	CGCAAGATTAGCCCAATGAATGGCTCCCTCCCTCCCTGAGAGCATAAAGTCGTGCATCAATTAGATGATG TTACAAGAGATCTGAAGTGAAGCCACGCAATTTTATGATCAATTTGATCGGGGCTAGCGCTGAAAAGATC GCTAAATGGTTAAAGAGATCCAAGAACCTTTGCAAAAACAC	1010	GKISPNEWPPPPTEEHKVHQLDDV TRDSEVKATQIFDQLDLIGASAEKAKM VKKIQEPLQKH
HP0062	1011	GGTGCTTTAGCCTATTATTAGAACGCGATGGGCCAACAAACAGGGTTTAAATGCAATGCTCTGCCCTGATCCTT CCAAACGCTGTTTGTCTATGCTGGAGTTATAAAACGGATCAAGTAATACTAACGGCGATACAGGCAACAACCCC CCAAAGAGGCAATGTCAATGCCACCTTTGATATGCAATCTCTAGTCAATAA	1012	VPLAYYLEAMGQQTRVLMQMLCPDPS KRCLLYAGGYKNGSSNTNGDTGNPNP RGNVNAITFDMQSLVN
HP0062	1013	CCGATAAGGGATTAAAAAGGTGTTCAAGACAGCAAAAAGACGCTTGGGGTTTCATCTATGAGATCAGCGAGTTC ATGAAAGCCTATACCGCATTTGCTAAAAAACAAGACCGATACGCTATTATTAGGATCTCCCTCTAGGATTGG GCCAGCATTTTAAACGACTGCCCTTTATGTCAATACCTGATTTGACGCTTTGAAAAGCTTTGGTGCTTATTATT ACCAACTTGGATTGACGAGGACGATCACGGCGATCAAGCAACAGTATCAACATTATCAAAAACGTTAAAAGC AATAAGAGCGTTGAACCATCAAGAGCTTATATTGAATAGCATCGACTCTTATAACACCTTTGATCAATACCTCTATA ACTTATGGGATAGCTCTTCTGTTATCATAGCAATGGTGCGTCTGCTTAGCCCTAGCTAATTTTATTCATGGCAG ATGAAGAGAAACCCCATTTTATCGCTATGGATGCCGAAACCCAAAGTGGAGCATATTTGCCACAACGCCCAAGA GGCAGTCAATGGAAACGCGGATTTTGACAAAGAAAAAGAGAAATGGGTAATAATATCGGAATTAACCCCTTTTA AAGCGTAAAAAGAACGCGCATGCTTTAAACGGGATTTTATGATAAAAGAAAAATTTATGGAGGCAAAAGACACGAG CAAAGTGATTAGCTGTTATGACATCACTAAAGAAATTGTATAGCAATTA	1014	DKGLKKVKDKSKDACGFIYEISEFMK AYTALLKKQDRYVYLLRYLPSRYWASI LTTALYVKYPDFDALKKLLVSYYYQTWI AGGTITRIKQTSINIKNVKSNSKSVETIKE LILNSIDSYNTFDQYLYNLWDSSSVYHS KWVRPVLALANYFMADEEKPHFIAMD AETQVEHILPQTPKRGSQWNADFKE KREEWVNNIANLTLLKRKNHAHALNGD FDEKRIYGGKDTSKVISCYDITKELYS N

HP0184	1015	AGCATGCGGTGATGAGTAAATCGGTGGCGATGCCCTTTGGCGTGATCAACAAGGCGAGTTGAAGATTTGTGTAAG GGCGCGCATCTCCAAACACCCGTTTTTAAACCATTTTAAAGCTCACTAACTGGCTGGGCTTATTTGGCGGCGGA TGAAACAATGAAATGCTCATTAGAACTCTATGGAATCGCTTTGCCACCAAGAGGGTTAAAGACTATCTTTTCCAA ATAGAAGAACGCAAAACGAGATCACAGAAAGCTAGGCGTAGGCTTTAGCTTTAGCTTTGATGATGAGATAGG GGCGGCTTACCTTTATGGCTGCCCTAAAGGGGCAAGCTTAGGAAGCGCATTAAGAGCGATGTGGAATCAGCGGCGATTATGA CTTTAAGAGGCTATGAGCGGCTTAAAGGCTCTGAGATTTAAGAGCGGATGTGGAATCAGCGGCGATTATGA CAACTATAAGAAACATGATTTACCCAGGATGATGAGCAAGATATGCCATAAGCCTATGAAGCTGCGTGGGC ATATTAAGTCTATCAAGCGCTTGCACAGCTACAGAGATTTGCCCTTAAGGTTTATGAATACGCGTGGTGCATC GGCATGAAAGCGGCTGTTGCATGGGCTTTAAGGTTAGGGAATTTACCCAGATGATGCAAGCTTTTATTTAGC TCTTTGAACAGATCCAAAGCGAGTGAGCGGATTTAGATTTACGCACAAATCATGCAAGCTTTTATTTAGC TATGAAATGGAATTTACCAAGCGGCTAAATCCATAGCGGATGATAAGTTTGGGAAAGGCCACTAACGCTTT AAAAGAGCCCTTAAAGAACACCGCATTTGATTAAGATGATGAAGGGGAGGCTTTCTATGGGCTAAGATTG ACATTAATCACTGACGCTTAAAGCGTAAATGGCAGTGTCAGGATTAAGTGGATGAATTTGCCTGAACGCT TCAAGCTCGCTTCACTAA	1016	HAVMSKIGGDAFGVYQQGEFEDLCKG PHLPNTRFLNHFKLTKLAGAYLGGDEN NEMIRYIGIAFATKEGLKDYLFQIEEAK KRDHRKLGVELGLFSFDCIEIGAGLPW LPKGARLKRIEDLLSQALLRGYEPVK GPEILKSDVWKISGHYDNYKENMYFTT IDQEYGIKPMNCVGHKYYQSALHSY RDLPLRFYEGVWHRHEKSGVLHGLL RVREFTQDDAHIFCSFEQIQSEVSAILD FTHKIMQAFDFSMELESTRPAKSIGD DKVWEKATNALKEALKEHRIIDYKIDEG GGAFYGPKIDIKITDALKRWQCGTIQV DMNLPERFKLFTNEYNHAEQPMIHR AILGSFERFIALSEHFGGJNFFVAPT QIALIPINEEHVFAKLEALKKRDIFV EVLKNDLSLKKVRLAEKQKIPMLVLG NEEVETEILSIRDREKQDQYKIMPLKEFL NMVESKMQEVSF
HP0184	1017	GCAAAATATTTAATGAGTTTTGTGGTGGCGAGCTTGCGGAAATCAGGCCGTTGGATAAATACGGCAAGG AATTATTGGTTTTAAAGACCGGAAAGACAATGATTTGTTTTAAGCCCCACTTTAGAAGAAATATCACCGAAATTGC CGCTAATTTCAATTAAGATTACAAGCAATTGCCGTCCTATCTATCAATCCACACGAAATCCGCTGATGAAATCCG CCCAAGATTTGGGCTGGTGAGCGGAGGAAATTTATCATGAAGATGTTACAGCTTTATGAAGACGCTGAGAGCT TGATAAGGAATTTTAAACACGCAAGCGCTTAAAGAGATTTAAGCGATTTGGGTTGGATTTTCCGATTGTGG AAGCGGATAGCGGGCGATTGGAGGAGTAAAGCAGGAAATTTGCTTTTAAACCGAATGCGGGAAGACACCGA TCGTGGTGTGTCAAAATTCGCTTATGCGGCTAACATTGAATCGCTAAACGCTCTAAAGGCCCTGAGCCTTTAAATG TCCCAAAAGCGCAATTAGCGAAATTCCTACCCCTAATACCACTAGCGCGCAAGCGTGCGGAGTTTTTAAACA GAGCCTTATTTGTCTTAAAGCGCTTGTAGAAAGTGATCCATAAGATTAAGAAACCCCTAGCGTGCTTTTGTCA GGGCGGATGACAAATTTAGAGGAAGTTAAAGCCCTAAACGCTTGAACATTATAGGAGCGAATGCTTTAGAATTGAGA GAGGCGAGTCAAAAGATTTGGATAATGTGGGTTAATAGCGGTTTTATAGGCGCTTATGGCTTGAAAAAGCATGT TTCTTACATTTATTTGATGAAGATTTAAAGAGGCGGATTTGATCGCTGGGCTAATGAAGAGGATTTTCATGC GGTGGCGTGATTTAAAGGGTTTGAATCTTGTATGCGGATATTGTCAGGTTAAAGAGAGCGGATCGTTGCC CTAATTGTCAAGGAGCG	1018	QNILMSFVVLASLWEKSGRLDKYGKEL LVFKDRKDNDFVLSPTLEENITEIAANFI KSYKQLPVHLYQHTKFRIDEIRPRFGLV RAREFIMKDGYSFHEDAESLDKEFLNT QSAYKEILSDLGLDFRIVEADSGAIGGS KSREFVWLTECGEDTIVCQNCDDYAAAN IEIAKRSKRPEPLNVPKAQLAKFPTPNT TSAQSVAEFFKTEPYFVLKALVRKVIHK DKETLACFFVRGDDNLEEVKALNALNII GANALELREASQKDLNGLIAGFIGP YGLKHHVSYIIFDEDLKEGDCLAGANE KDFHAVGVDLKGFENLVYADIVQVKES DRCPNCQGALKYHKSLEVGHIKLGQ GYAKSLKASFLDKNGKEQFFEMGCGYGI GISRLLSAILEQKSDDLGCVWTKNTAP FDVVIVVSNWKDEAQKLAFFEVYERLL QKGVDAALLDDRDRARFGAKMRDFELIG ERLALIIGKQTLSEKFEKIKRANLEKQT IKDIELEEKILEMIESE

HP0184	1019	AAACCTTAAAGGCGAAGGCTATAAGATCGCTGAAGGGCGCTATGAAAAATGGCATGGGGTGGGCGCTTTTGATTT GGATACCGGCTTGCTAAAAATCCAAAAAGCGCAATCTTATCGCCCACTGAAGCGTATTTCTAACACCCCTTTTAGAATT AGCTAAAAAGATGAAAAATCGTAGCGGTAAACCGCGCATGCTAGCGGCACAGGATTAGACAACTCATTGAC GCTTACCGCTTTTGCGCTTTTGATGTCGCTATCGCTAGCAACACGCTTAACTTCTAGCAGCGCTATGGCTAAAGAG GGTTTAAACCTTTTGAGCATGCTATTCTACTTTTGCAGAGGCTTATGATTTCTATGTCATGACGCTTGATTT CTAGCTTGGCGATTAAATTAGCCATTGACAGGGCTGGATTGTGGCGAAGATGGCAGACGCACCAAGGCGCTTT AGACGTGTCGATTGCGCTATCCCTAACATGCTCATTTTGGCCACGAGACAATGAGACTTTAAAAAACGCCGT GCGTTTGCCAAATGAACACGATTCAAGCCCTTGCGCTCCGATACCTAGGGGTCGTTTGCCTTAAAAAGAGGGG GTTTTGAGCCCTAGCGGTTTTGTTTAGGCCAAAGCGAATTGTTGAAAAAGAGGGCGAAATTTTACTCATAGGCTAT GGTAATGGCGTGGGCGGCGCATTTAGTCCAACTGGCTTTAAAAAGAAAAACATAGAAATGCGCTCTCTGGATCT CAGGTTTTAAAGCCTTAGATCCAAATTAAGCGCGATCGTTGCGCTTATCAAAGCTCTATGTTTTAGCGATAAT TACAAGCTTGAGGGGTGGCTAGCGGATTTAGAGTTTTGAGCGAACAAATATTTAAAGCCTGTTAAAAAGCTTT GAAATCATGATGAATTAATCATGATGGGAACCGCTTTAGTGGAAAAATCCTTAGGATTAGAC	1020	TLKGKGYKIAEGRYEKWHGVGPFDL TGLSKSKSAILSPTSEAYSNLTLELAKK DEKIVGVTAAAMPSTGLDKLIDAYPLRF FDVAIEQHALTSSSAMAKEGKPFVSI YSTFLQRAYDSIVHDACISSLPKLAIDR AGIVGEDGETHQGLLDVSYLRSIPNMVI FAPRDNETLKNVRFANEHDSPPCAF RYPRGSFALKEGVFEPGFLVQSELL KKEGEILLIGYNGVGRAHLVQLALKE KNIECALLDLRFLKPLDPNLSAIVAPYQ KLYVFSNDYKLGGAASAILLEFLSEQNIL KPKVKSFEIIDEFIMHGNTALVEKSLGLD
HP0184	1021	CCGTGTTCTATCTCAATGGCATGACGACTTGAAGATCGCTGGCACAGGCGTTTTACGCAAGATTACAGCGGCGC TAACAGCGTTTTAGTGTTCAACCAACCAACCCCTTTCTGCTGGGCGAATCCCACTTCTAATAGCGTGGTGATTT TGGGAAACTTCAGGGCTGAATGGGGTAGTGGCTATATTCAAGCGTTTTAAAGCCAATCAAAATGACATTA CCGGCACGATTGCTCTGCTGTAATGGGCGCAACCGGTGGGGCGGACTTATGTTTAAAGCTCAAAAGCGTTT GAATATCGCTAACGCTCATTTGAATACGATAAAGCCGTTTGCAAAATTCATGGATGAATTTTCTGTCATTAATGGT AATTTGAATGTAACAAACGCAAAATTTAGCAACCAACCCACATGAGGCTTAAACCTTAAGGCCAATAACATTACT TGGGATAAAGGCTCTGTGAATGGAGGGGGAATTTTGGCGTGATAACGCCGATAGCAATGGCGCAACCAACCATTA CGGGAGTAACCTTCAATAAAGCGCACTTTGATTTATAAGGGGTGAAATAGCGCGGAAATCTTTAACCCCTAG AAAAACAACCTTCAATTCCTACAATATCAACGCAAAAGCGCAAAACCTAATTTTAAACAACAACTCGTTAATGGCGG TAGCTATTGTTTTAATGACACTAAAAACACCACTTTAAAGGCAACAACTCATTAAACAGCGATCCTTTTAGCCG CCTTAAAGGATCAGTTTTCTATTGAAATAATAGTGTTTAATATTGAAGGGATTGACCGATAAAACCACTTACACG CTTTAAAGCGGAAATAGTATCAATACAATAACCAAGCTTTAGCGGACAATGCTTTTCAAAAAATTTATGGAATTA ATCCATTATGTTGGCAACAAAGGCACTCTATTAAAGAGCGGATAACAACACCTTTTTGTGCAATTCACCCCAAGCAAC GGCCAAAAATJTG	1022	VFLNGMTTWKIAGTGVTQDYSGAN SVLVFNQTTTFLAGANPTNSWVSFGK TSGAEWGLVGYIQGVFKANQIDITGIR SGNGAKTGGGATLVFNAQKRLNANA HLNNDKAGLQNSWMFVNVNNGNLNVT NAKFSNQTPHGGFNLKANNITWDKGS VNGGNGFVDNADSNAGATTISGVTFN NNGTLYKGGENSAGNSLTLENNTFNS YNINAKAQNLIFFNNNSFNGSGYSFNDT KNITTFKGTNLTNSDPFSRLKGSVSIEN NSVFNIERDLTDKTTYTLTLLSGNSIKYNN QALAGQCFFKFKMEFNPLWWRTDSSI KSG
HP0184	1023	ATGAAATTGTAAGATTCTGTGGCGGATATTGTGGATTCTAAAAAATAGACACCGCTGTTTTGGCTTTGTTCAATC AAGGGTATTTAAAGACGTTTTATGCCACTTTGAAGCGGCATATTAGAGTTTCATTTTGATGAAAAAGCCAGGATTG CCGGGTAGAAATCAAGGGTTATGGACTGAAAAAGGAAAAAGACGGCTTAAATCCCAATGGGATCAAAAAAGG CGACACCTTTGATGAGCAAAATTAAGACATGCTAAAAAGGCTTAAAAACCGCTTAGAGGGCGAGGCTATTATG GGAGCGTGTGAGGTGCGCACAGAAAGTCAAGTGGGTGCTATTGATGCTGTTGATGTAATAGGGGG ATAGCATTTATCAACAATCCATTTATGAGGGAAGCGCAAAATTAACCGCCGATGATTGAATCTTTGAGTGCGGA ACAAAGCAACGAGATTTATGCGGCTGATGTTGGGCTTGAATGACGGGAAATTCGTTTAGATCAACTAGAAATACGAT TCTATGCGTATCCAAGATGTATATCGTAGGGTTACTTAGACGCTCATATTCTCGCCTTTTGAACAAACGGAT TTTTCTACCCATGACGCTAAGCTTCAATTATAAGTCAAAAGAGGGATCCCAATACAGGATTTTACAGACATTTAATAGAG ATTGACAACCCGGTAGTCCCTTAAAAACCTTAGAAAAAGCGCTTAAAGTGAAGGAAAGATGCTTTAATATTAGAG CATTTAAGAGCGGATGCGCAATTTTAAAAACCGAAATCGCCGATAGGGTTATCGGTTTGGCGGTGGAAGCCAGA CTTGGATAAAGATGAAAAAAACGGGCTTGTAAGAGTCAATTATCGTATTGAAGTGGCGGATGTTGTTATATCAATGA TGTCATCATTTGAGGGAACCGCACGAGCGATAGGATCATTAGAAGGGAGTTATTGTTAGGGCTAAGGATAAAT ACAACTTGACCAAACTGAG	1024	EIVKIRVGDIVDSKKIDTAVLALFNQGYF KDVYATFEGGILEFHFDEKARIAAGVEIK GYGTEKEKDGLKQMGKKGDTFDEQ KLEHAKTALKTALLEGQGYGYSVEVRT EKVSEGALLIVFDVNRGDSYIKQSIYE GSAKLKRRMIESLSANKQRDFMGWM WGLNDGKLRLOQLEYDSMRIQDVYMR RGYLDAAHISSPFLKTDFTSHDAKLHYK VKEGIYRISDILIEDNPVPLKTEKAL KVKRKDVFNIEHLRADAQILKTEIADKG YAFAWKPDLDKDEKNGLVKVIYRIEVG DMVYINDVIISGNQRTSDRIIRRELLGP KDKYNLTCLRSENSENRLRGFFFSKVKI EEKRVNSSLMDLLVSVEEGRTGQLQF GLGYGSYGGLMLNGSVSENLFGTGQ SMSLYANIATGGGRSYPGMPK

HP0184	1025	CACCGCTCAAACCCCTTTAAACCATGCTAAACAACTCAAGCTTGAATGGGTGAGATTGTAGGGTTGAGCATTT TGATAAAGTGATTTATTAGATCAAGCCCTCATAGGCAAAACCCACGAAAGCAACCTGCCACTTACACGGGAGTG ATGGATGAATCAGGATTTATTGCGGAGCAAAAGAGCTAAATTTTAGGCTATAGTGGAGCCGTTTAGCTTT AATGTTAAAGGAGGCGGTGCGAGAAATGCCAAGCGATGGGACATTAATAATAGAAATGCACCTTTTGCCTGATGT GTTAGTCCAATCGGATAGCTGTAAGGGCGCTAAATACAAACCCCAACCTTTAGAAATCAAGGTGAAGGCAAAATCCA TTGCCGATGTGTTGAACATGAGCGTGAAGAGGCTTATGAATTTTTCCTAAATCCCTAAATCGCCGTGAAGTTAA AAACGCTTATGGATGTGGCTTAGGCTATATCATTAGGGCAAAACGCTACGACTTAAAGTGGGGGAGGCTCA AAGGATCAAAATTAGCTAAAGAAATTGAGTAAAGAACACAGGCAAAACCCCTTATATTTAGATGAGCCTACTACCGG TTTGCAATTTGAAGACGTGAATCATCTTTTCAAGTCTTGCAATTTTAGTGCGGTAGGCAATT	1026	TAQTLNHAKTQSLNGVEIVGLEHLD KVIYLDQAPIGKTPRSNPATYTGVMDEI RILFAEQKEAKILGYSASRFSFNWVKG RCEKCGDGDIDIKIEMHFLPDVVLVQCD CKGAKYNPQTLEIKVKGKSIADVLNMS VEEAYEFFAKFPKIAVKLKTLMVGLG YITLGNATTLGGGEAQRIKAKELSKK DTGKTLYLDEPTTGLHFEDVNHLLQVL HSLVALGN
HP0184	1027	AAGAACGATTTCTAAAGAGGTGCTTTCTTTTGAATCAAACTCCACCAACAGCTAGATGACATGACATGATGAT CGTAGTGAGGGATAGGTTAGCGCTATTCAAGTGGTTGCTTTAAGAAATGCTCATCATCAACCTCCCGCAAG AAGACGCGTGAACACAAAGAGACTGCTTGAAATCATTAACTAAGTTATAGAACTGGGGATCAATGATG TATAGAGAAAGGTGCTGCTGCTGCGGATTTACGAAGAGTGAGCGTTTGAAGAGTTAAGATAGATATCA AAACCGCTTCGCTGAAGTGAAGTTTAGAAGCGAGCGCTTTAGCGGTAGCCATTGAGCATGAGATCGATCAC TCAATGGCGTGTATTCTGCGTGAATTAATTCATTTGAAGCGTAAGAAATTTGAAAAAGAACTCAAGAGCTGCAAA AAAAACAAACACGAGTAACACCATGATTAAACCGATGTTTGCGGACCATGCAAGGGGAGTGCGCGAAATCG TGCTGTGGAAGCGA	1028	RTISKEVVSFDSKSLHQQLDDMHETMIA SEGIGLAIQVGLPLRLMLINLPOEDGV QHKEDCLEINPKFIEI'GGSMMYREGC LSVPGFYEEVERFEKVIEYQNRFAEV KVLAESELLAVAIQHEIDHLNGVLFVDK LSILKRKFEKELKELQKKQKHE
HP0184	1029	GCAAAAAGACGCTTGCGGTTCTATGATCAGCGAGTTCATGAAAGCCTATACCGCATTGCTAAAAAACAA GACCGATACGCTATTATTAGGTATCTCCCTCTAGTATTGGCCAGCATTTAAACGACTGCCCTTTATGTCAAA TACCTGATTTGACGCTTGAAAAAGCTTTTGCTGCTTATTATTACCAAACTTGATTGAGGAGGACGATCAG CGCATCAAGCAACCGATATCAACATTATCAAAACGTTAAAGCAATAAGAGCGTTGAAACCATCAAGAGCTTATA TTGAATAGCATCGACTCTTAAACCTTTGATCAATACCTCTATACCTATGGGATAGCTCTTCTGTTTATCATAGCA AATGGGTGCGTCTGCTTACCGCTAGCTAATTTATGCGAGATGAAGAGAAACCCCTTTATCGCTATGATG CCGAAACCCAAAGTGAGCATATTTGCCAAACGCCCAAGAGGAGTCAATGGAACCGGATTTGACAAAGA AAAAAGAGAAAGTGGTAAATATATCGCGAATTTAACCTTTTAAAGCGTAAAGAAACCGCATGCTTTAAACGG GGATTTGATGAAAAAGAAAAATTTATGAGGCAAGACACGAGCAAGTATTAGCTGTTATGACATCACTAAAGA ATTGATAGCAATTATAGGAAGTGAATG	1030	KKDACGFIYEISEFMKAYTALLKKQDRY VYLLRYPSPRYWASILTTALYVKYPDFD ALKKLLVSYYYQTWIA'GGTITRIKQTSIN IKNVKSNSVETIKELILNSIDSYNTFDQ YLYNLWDSSSVYHSKWVRPVLALANY FMADEEKPHFIAMDIAETQVEHILPQTP KRGSQWNADFDEKKE'ZEEWVNNIANLT LLKRKNAHALNGDFIDEKRIYGGKDT SKVISCYDITKELYSN'RKWN
HP0879	1031	TTGAAGAAATACCGAGCGTGTGTTGAAAAAGACAGGCTTTAATAGCGTCTTTCAGTCATAAAAGTTGAAGCGCTT CTAAAGAGGCGGTGTTACTTGATTTTAAAAAGATCGCTCCCTTTATGAAGAACACCAAGGTCGTTATGATGAGA GCGTGTAAAGGCATGCGTGATTTAACGAGTGATTAACATGATGATAAATCTTGCGGATAAAGCGATTGAATTAT TAGATGAGGTGGGATCGAGGAAAAAATCAGCCCTAAAAAGGGCAAAAAATCGCGTTGATGATGTAAGAGAAAC GCTCGCTCTAAAGCTTAAATCCCTAAATCGGTTTGAGCAGCGACAAAAAGCCCTTTTAAAGGAATTTGAAAAATC GCTTAAAAATAAGATTTTGGCCAAAGCAGAGCGATCAGTCTTGTCAGCAATCGGATTAATCCAGCATTCGCGGC TTTCTGCAAAAAATAAGCCTGTGGGAGCTTTTATTCTGCGGCTAGTGGGTGGGAAACAGAAATGGCTAAA GAATTGGCCTTGAATTTGAATTTGCAATTTGAACGCTTTGACATGAGCGAATACAAAGAAAGCCCATAGCGTGGCAAAA CTCATCGGGAGTCTAGCGGTTATGTTGGGT	1032	EEYRSVFEKDKAFNRFRFSVIKVEEPSK EACYLILKKIAPLYEEH-HQVRYDESVFK ACVDLTSDYMHDKFLPDKAIELLDEVG SRKKISPKKGGKIGVDDVKETLALKLI PKMRLSSDKKALLRNLEKSLKNKIFAQ AEAISLVSNAIKIQHCGLSAKNKPVSF LFVGPSPGVGKTELAK ELALNLLHFER FDMSEYKEAHSVAKLIGSPSGYVG
HP0879	1033	ATGAGCAAAAGGACTTGATGGTTGGGTTGAAAAATAGCGAATCGCATTTGTTGGGTGAGTCAAGATTTAAGCGCT CGCATCGCCCTGATGAAGCTTTTCGCTCAAAATTTCAAGACTGCCAACAAAGAGTTGCTCTTCTACACGCCGAAAA ACGCTTGCAGAGAACTTGATGAGTTGAAAAAACACCAATCAGCCCATGCAAGGCCCTCTAGGAGCGTTTTG GACACCGCTATGAATCCTAATAGCGTGTGTGATAGACAATCTCAACGAAGCCAAAGAGTTGCACGACAAAATAGG GGTGGAAAAATTAAGATCGTTTTTAGAAAAAGCCACAGACAACGAGTATTGCATCATCTTTGCGCACGACCTCA AACAGATTCAAGCTAATTAGCATCTTAGCAAGTTAAAGAAATTTGTTAAACAACCACTTCAAAACACGCCCTGGCCTTA GGTGAATGGTGAGAACT	1034	EQKDLVGFENSESIFLLVVSQDLSARI ALMKLFAQNFKTANKELLFYNAEKRLA RELDLKKHHITPMQGPLGSLVLTAMN PNSVLVIDNLNEAKELHDKIGVEKLSF LEKATDNEQYCIIFAHDLKQIQANYDLS KLKELLNNHFKQRLAFRCNGEN

HP0879	1035	AGACGAGTTTGGCCAGACAGGAATTGAAAAATCCAGGCTTACCCCAAGCGCAAGAAATTAAGGCAGTTGATCAGAGAT GGGGCTGTGAGGTTGCAAACTTCTGCCATTCCCTTATCCTACTACTTGGATATTTAGGGAATAAAACAGCAACTCTT TTGCGTGAAGCCTGAAAAACAATGCACAACCATCACAAACGCGCAACCGCAACCAACGCGCAACCAACGCGCAACCA CCAAGCCTTAGCCAAATTTAGAGCAATCTCTAGGATTTTAGGAAACATTATGGATCTATCCCAACAATACGCTAGTCA GGGTGCATTAAAGCCTTTGGTGGTGGATGTGGGAAGAAACAATCGGTATCACGGATAGCATGCTCTTGGTGGCT CAAAACATCGTTTTAGCTTTAGGGCAAGTGGATTTAGCAAAATCCAAACAAACAATAACGAACAGCTATACGAAAT ATTATGAAAGTCATGCTTTAGGCGGGCGGACTAATGGGCGTATAATGGCGTGAGTGTGGCGGACATTGCCA CGGGCATGCAAAATTTTCTCGCAACGGCTTGATAGGGCTAATCTACGGTTAGCGAGCTGAATGCTTTGATT AAGAGCGGATTTCTTTGGATCGTGAGACTTTGGGGTAGGGATTTATTGAAAAAATATCTGTAGCGGTGCATC GCTTGTTTAGTGGGAATCAGCTTATCTATAAGAAAGGCTAGACAGAACATAA	1036	TSLARQELKNPFGFTQAQELRQLIRDGA VRLQTSAILPSYYLDILGNKTATLLRESL KNNAPSQPNAQPQQNGPSNQALA NLEQSLGILGKLLDLSQQYASQGVKPL VVDVGKEQIGTDSMLLV AQNIVLALGO VDLSKIQNNNEQLYENIMKVMMLGAG GTNGAYNGVSVGDIATGMQNFSSQTG LIGANSTVSELNALIKSGISLDRETGLG SFIEKNICSGASSCFSGNQLIYKGLDR TI
HP0879	1037	TTTAAAGCGCTTACAAGCTCAAGGCGCAAGCACTTATAAGAAAGCGAGCTTAGCCGTAAACCACACAGAAATCATGCT TTAAAGTTTGGGAGCTGATATTCACAATCAAGACGGCGTTTTAAAAATTTACCCCTAGAAAAACCCCTAGAAAGCCT TTGATTTTACGATAGCTAATGATCCGTCTAGCGGTTTTTTTTCGCCCTCGCTTGCAGATTACGCCAAAAAGCGCGCC TTCTTTTAAAAATGCTTGTCAACCCCACTCGCATAGAACGTTTTGAAGTTTTGAAAAAAATGGGTGCTTCCATAGA GTATCGGATTCAGTCCAAAGATTTAGAAATGATTGGCGATATTTATGTAGAGCATGCCCTTTAAAGCGCATCAAT TGATCAAAATATCGCCAGTCTTATTGATGAAATCCCGCTTAAAGTATCGCTATGCTTTTGCAAAAGGCAAAAGCAT GGTTAAAAACGCTAAAGATTTACGAGCTAAAGAAAGCGACAGGATTAAGCGGTTGTTCTAATTTCAAAGCTTTAGG GATTGAGTGCGAAGAGTTGAAGATGGTTTTATGTAGAGGATTAGAAGATATAAGCCCATTAAGAACAGCGCTTTTC TAGGATTAAGCCCCCTTATCAAAAGCTTCAATGACCAAGGATTGCGATGAGTTTGTCTTTTAACTTTAGCGT	1038	LSALQAQGASTYKESELSRNLHTEIMLK SLGADIHNQDGVLKISPLEKPLEAFDFT IANDPSSAFFFALACAITPKSRLLKKNVL LNPTRIEAFEVLLKMGASIEYAIQSKDL EMIGDIYVEHAPLKAINIDQNIASLIDEIP ALSIAMLFAKGKSMVKNAKDLRAKESD RIKAVVSNFKALGIECEEFEDGFYVEGL EDISPLKQRFRIKPLIKSFNDHRIAMS FAVLTLA
HP0879	1039	TTTCACGCAGAAATCCTAACAAAAATCCCAATCGCGCTCGCTAGCGCTAATGTTTTGAAAGCTGTTGGTGTGTTTTG AAAAAGTAGAATCCATTCGCGATGCAACGCAATTTTGGCCCCCTTATCGCAAGGTTCAAATGGAGTGATTAAAGATA TTGTCCCCAAAAAGCGATTATAACCCCTACTATGATGTTAAAGCGATGGTTGATAGGTTGATTTCAGATAGTAGGG TGAAGTATCCTTGGTGGCGCAAGAGCTTCTAGAAAAACAAAAAACCAAGAAATTCGCGGGAGAGAGAGATTT GTGCGTGTGAGTTGGGATGTGGCGTTGGATTTAGCGGCTAAAGGCTTAAAGAAATCCCTAAAGAAAAACATTTATAAT GCCAGTTATGGTGGCTGGGGCATGC	1040	SRRSILTKIPIALASANVLKAVGVFEKVE SIPHATHFGPFIAKVQNGVIKDIVPQKS DYNPTMMLKAMVDRVYSDSRVKYPCV RKSFLENKKNHKELRGREEFVRVSWD VALDLAAKKLKEIPKENIYNASYGGWG H
HP0879	1041	TATTGCTCAAAGGCAAGGGCGCTGATGAGAAAAAATCAAACTTTAGCCCAAAAACCTAGGCGTAAAGCGGAGTTT GGGTTTGTCAATTCCAATGAATGTTAGAGATCTTAAAAACTTGACCCCTTTATGTGCATGCAGCCAATGTGGAAGC GAAGCGATTGCGTGTAGAGGCCATTAGCGTGGGATTGTGCCGTATCGCTA	1042	LLKGGKGPDEKKIKLLAQKLGVKAEEFGF VNSNELLEILKTCCTLYVHAANVESEAI CLEAISVGIVPVIA
HP0879	1043	TGGCTCATAAAACATCCAAGTGTTTTAGAGCTTTTAAAGGCTTTAGAGAAAAATCGTTGAAAAATAGCGATGGGG AGTCTCTTTATCGCTTGGTGATCTTGATGAAGATAAGCCTTGCAGAGCGTGGAGAGCGCGTATATGAAACTTTTA GCGCTCTCTTTAGGTAAAGCCCTTTGAGGAGTTTGAATTTAGAGGTTATTTAACCAAGCTTCTAATGCGGCGCTGG AGCGGTAAACAAGCCCTATGAATTAGAATGGCTTAGAATGAACGAAGTGCTTTAAAAATGCGAGACCAATTCCTCTAG CATTGATTTCATAGATAAATCCCAAGCTATTGATGCAATTAATCCCTGAGTTTGATAATATCCGCTTATTGGATAGC TCAAAAACGCGCTTGGGGCGTATTAGGGACTGGAGGTATACCCCAATGCCGCGCTAGTTATGTGAATTTTAA CGCAGGGGCTATGGAGTGTGCATGAATGAGGGCGTATTTCTTCATCGTGGTGGTTGGAGCAGGCACTGATATT GGTGGGGGAGCGAGCGTGTAGCGCTTTTAAAGTGGAGGGAATAACAACCCCAATAGCATCGGAAAAAATGTTTTC TAGGGGCTAATAGCGTTACTGGAATTAGTCTAGCGGATGGCTGTATCGTGGATGCAGGCGTTGCGATACTAGCCGG GAGCGTGATAGAAATTGAAGAAAAATGAGTTTAAAAAGCTTTTGAAGTGAATAGCGCTTAGAAAAACATGCCAACAA CCTTTACAAAGGCAAGAACTTTCGGGAAAAAATGGCGTGCAATTTGCTTCCAAATAGT	1044	AHKNIQVVLLELLKALEENRLKNSDGES LYRLVILYEDKPCSEVESAYMKLLALS GKAPRLSNLEGFNQLSNAAWSGNKP YELEWLRMNEVALKMRDHPFSIDFK FPRYLMQLIPEFDNIRLLDSSKTRFGAY LGTGGYTQMPGASYVNFNAGAMGVC MNEGRISSSVVWVAGTDIGGGASVLG VLSGGNNNPISIGKNCLLGANSVTGISL GDGCIVDAGVAILAGSVIEIEENEFKLL EVNSALEKHANNLYKGKELSGKNGVH FRSNS

[illegible]

		GC TTTTATGGCCTCCTGGCGTGGGTAAACAAGCTTAGCTAATTCCA		VGKTS LANS	
HP0879	1055	AGACACCTAACTTAAACACACACACCTTTCTATGAAGGGGAATTTGAGCGTTAATGAGCCTAAACCTTACGCCAA ATGGCAAGAGCAACACGCTTAAACGCTAGCAAGCTAGGAAGACACCACTGGGATTTACATTTGCATGACGGG CCGCCCTTATGCGAACGGCATTTGCAATTTGGGCATGCCCTTAAATAATTTTAAAGACATTTGCTGTTAAAGAGAA TATTTAAGGGGAAGAAATCTATTACACGCCCGGTTGGGATTTGCCATTTGCCATTTGAGCAGCAATTTTAGA GCGATTAGAAAAAGAAAAACAAGCCTAGAAAAACCCACGCTGTTTAGAGAAAGTGCCGAGATCATGCGAAGAAAT TTTTAGAAATCCAAAGAAATGAATTTTGAATTTGGGATTTTGAAGATCCTTATAAAACCATGGATTT TAAATTTGAAGCGGAGCATTTATAGAGCCTTAGTGAAGTGGCTAAAGGCGCTTTTGAAGAGCGCCACAA	1056	DTLNNTTTFSMKGNLSVNEPKTYAK WQEQAFKRMQARKDNHGDFTLHDG PPYANGHLHLGHALNKILKIDIVVKREYF KGKIIYTPGWDCCHGLPIEQILERLE KEKTSLENPTLFRKCRDHAKKFLFIQ KNEFLQLGLVGDFOEPYKTMDFKFEAS IYRALVEVAKKGLLKERH	
HP0879	1057	GCCAGATTGAAACCTTAAATAATTTGGCTATCGCACCCCATGGCTTTTATTGAGTTTGTAAAGCGCATGGCGGATT CCTATCTTTTAGACGATCCTTTAGAAAAAGATAAGGCTCTTAAAGAAATGTTAGGGTTTTTAAAGAACTTTTCTTGTCT TTTACAAAGCGAATACAGCGCTTAATCGCTACCTTTTGAAGCGCTTTGCAATGTTTGGGATTTAGGATTTAGAGCGGAGT CTCTTTTACGCCCTTTTACCCCAAAACAGAAAAACCAATCGCCCTCAAGGTTTGGCATGTTTCTAGCGCGCCCA GTTTGGAAATTTTAGAAAAATAGTGATCCGCTATCTTTTAGAAGACAGAGCTTTGTTGGAATTTAGCGGTGGGTATA TCCATAGTGGGTATCTTGCTATAAAACAAGAAATTTGACGCTTTGTGTCAGAAAGAAATTTAGACGACCTAAATTAG TTGCGTTATTATTAGATGCGAATTTACCCCTAAAGAGCTGCTTCTTTAGCGAAAGAAATTTGCGTTTGTGATTTTGGCT ATTTTGAAGCGCAACTCAAGAAATCCCTAAAGCTGCTTCTTTAGCGAAAGAAATTTGCTGTTTAAAGAGGCTC GCCAGGCCATTATGAATTTAAACAAGGAGAAATTTAGTCCCATATGAAGAAATTTAGCCTTTATTCAGTGG GGGTTGGATAGTTTGTGCTCATGAATTTACTCATTTGATCAAGGCTTGAAGTAAACCGCTTTGACCTTTAATATAGG GTTTGGGGGAATAAAGATAAAGAGAGATTTTGAAGCGCCACCGCGCAATTTGGGCTAAGCTCTTGGTGTGC GATATTAGAGAGCAGTTTTTAAACGATGTGTTTCAAGCCCAAA	1058	QIETLKNWLSHPMAFIEFVLRMMADSY LLDDPLEKOKALKEMLGLKNFSLLO SEYKPLIATLLOAPLHVLGIRERSFQF FYPKTEKPNRQRFQFAHVSSAPSLEFLE KLVIYLLLEDRLSLDLAVGYHSGVFLH KKQEFDALCQEKDDPKLVALLLDANL PLKKGFEKELRLILRYFERQLKEIPK SSLPFSEKMICLKKARQAIMKLKQGEL VAI	
HP0879	1059	TCACCTACATGAGGACCGATAGCTTGAATATCGCTAAAGAGGCTTTAGAAAGAGCGGAAATAGATTTTAAAGACT ATGGCAAGACTATTTACCCCTAAAGCCAAAGCTTATCCAGCAAGATAAAACGCCCAAGAAAGCCCATGAAGCG ATCAGGCCACTTCTATTATTTAGAGCCAAACGCTTAAAGACTACCTTAAGCCTGAAGAAATTAAGGCTCTATACC TTAATTTACAAACGCTTTTAGCTTCTCAATGCAAGACGCTCTTTTGAAGCCCAAGCGTGGTTGTGGCTTGGCAA AAAGCGGAGTTTAAAGCGAGTGGGAGAAAGCTCTTTTGTGCTATTATAAATTTTAGGCAATGACGATAAGGA CAAATTTGCTCCCAATTTGAAGAAATGACCCCATTAATTAAGAACTAGAGAGCAACGCCCATGTTACAGAACCC TCCAGCACGCTATTCTGAAGCGAGCTTGATTAAAGTTTGAAGTTTAGGCTAGGCAATGAGGCGCCAGCACCTACGCC CAACGATTTCCCTTTTACAAACACAGAGACTACATCAAGGTAGAAAAAGCAATCAGTGCTTTAGAGAGCGCTTTTA AGGTGATAGAAATTTAGAAAGCAATTTGAAGAAATCGTGGAATTTCAAGGACTTTTACTACCTTTTATGGAAGAAATTTG ACAATATCGCTCAAAATAAGCCGACTACCAGCAAGCTTTAAGGACTTTTACTACCTTTTATGGATAAAATTTGAAG CTGGGAAAAAGAAATATCATCTCTCAAAAGTGCTGAAAAAACCCGTCATCATGCTTAAATGCGGTGGGAAATTA GTCAAAAAAATAGCCGTTATGGGAGTTTATCGCTTGCAACAATACCCCTAAATGCAAAATATGTCAAAACAAACTGAA AGCGCTAATGATGAAGCCGATCAAGAAATTTGTGCGAAAAATCGGGAGGGAATGTCGCAAAATTCAGCAGAAACG GGCGCTTTTAGCTTG	1060	TYMRTDLSLNIKEALEEARNKILKDYGK DYLPPKAKVYSSKNKNAQEAHEAIRPT SILLEPNAL KDYLKPEELRLYTLIYKRFL ASQMDALFESQSVVACEKGEFKAS GRKLLFDGYKILGNDDDKLLPNLKE NDPIKLEKLESNHVTETPPARYSEASLI KVLES LGIGRPSTYAPTISLLQNRDYK VEKKQISALESAFKVIEILEKHFEIIVDS KFSASLEEEELDNIAQNKADYQQVLKDF YYPFMDKIEAGKKNISQKVHEKTQS CPKCGGELVKKNSRYGEFIACNNYPK CKYVKQTESANDEADQELCEKCGGEM VQKFSRNGAFLACNNYPECKNTKSLP NTPNAKETIEGVKCEPCGGGDIALKRST KGSFYGCNNYPKCNFLSNHKPINKR EKCHYLMSEIRYRKKAHECIKCKEFP FLEEDNG	

HP0879	1061	CATTATCCTTTCTAGCGGTATCGCTACACACACCGAATTGCAAGACGCTATCTCATTTGTCAGAAGAGTGAATAATT TGACATCACCCCTTTTAAATGCGTGAGCGCTTATCCAGTAAATAGAACGCTAATCTTTGAGCATGGTTAAAT AGCGAAATCTTTGGCGTTAAATTTGGCTGAGCGATCACGATGCTCTCTTTGCCCATTTTAGCCACCATTT AGGAGCGAGCATGATAGAAAGCATTTTCAATTTAAACAATCTTACAAACCCAGACAGCGCTTTTAGCATGGATTT TAACGGATTTAAAGCATGTTGAAGCCATCAAGCAAGCGTTTAGCCTTAGCGGAAGAGAGCCCAAGATCAATC CAAGACTTTAGAAAGCGAAGATTTTTCACGCTCTTTATTGTTATTAGGATATTCAAAAAGCGCAAGCATTGAC TGAAAACAATATCAAGCCTTAGCGCCCAACCTTGCTTACACCTAAATTTTATAAGAAATTTTAGGCCAAAAGC ATCAAAATCTTAAAGCCAACACCCCTTAAGCGCTGATGATATAGAACGCTCATTTAGGTTT	1062	IILSSGIATHTELQDAISLCRVRNFDITL LKCVSAYPSKIEDANLLSMVKLGEIFGV KFGLSDHTIGSLCPILATTI.GASMIKH FILNKSLOTDPDSAFSMDFNFGKSMVEA IKQSVLALGEEEEPRINPKTLEKRRFFAR SLFVIKDIQKGEALTENNIALRPNLGL HPKFYKEILGQKASKFLKANTPLSADDI ERSL
HP0879	1063	CGACTTTTGCTCGTTGTATGAAAAAACCCCTATTGTTCAAAATGCTCAGTTTACATAGGGGTATTAACTTTGTTAAA AGAGTTTGATAAGGCCCGCCAGAAAAATCGCAGAATTATCCCTTTTGACAGCGGTTTGTGTTAGACTTATACACCGCAC AAAAAATTCGATCAAGCTTCCAAACAAGCTTCTTTGATCTATCAAGAAAAAAGACCCCTAAATCTTAGGATTAGAG GCCATTTATCATTATGAAAGCTTGAGTGGGAATAAGAAAAAGCTCACCAAGAAGAGATGTTGCCTATCATTTCAAAA TTAGAGCAAGCCCAAGAGCGCCAAAG	1064	TFARLYEKNPIVQNAQFYIGVLILLKEFD KAQKIAELFPFDRRLLLDLYTAQKKFDQ ASKQASLIYQEKKDPKFLGLEAIYHYES LSANKKKLTKEEMLPIIQKILEQATKERQ
HP0879	1065	CAAAAACGGCCCTATAAATTGGATAATACCCCTATTGAAGAAAAATTGGCATGTTATGCTTGCAAAACGCTATTCTAA AGCCTATTGACCATTTATTAGGGCTAAAGAACTCACTACGCTCGTTGGCCAGCTTGACAAATTTGCATTTTAT TTAGAGCTGGTGAAGAACGCCAGAAACGCCATTTTAGAAAGCGGTTTTGAGTTTTAAAGAAATTTTGGAGAAA TACAACTCCCGCTCTCATTGAATGATGGAATGCAAAATACTAAAGCGTTTTTACCATCAATAAAGTTTTCTTAA AAATAAGGCTTTAGTTTTTAAATTTTATTAAACAAACCCCTATCTTTGATAAATCTCAGGGTGGTCTTTTAAAC GCCTATGGAACCAAAATAACTTCCGGGTGTTCTAATCACCTCTCGCACAACTCGCTTGGCTTGGCTGCGAT	1066	KNAPYKLDNTPIEENCAC/ACKRYSKA YLHHLFRAKELTYARLASLHNLHFYLEL VKNARNAILEKRFLSFKEFLEKYNRSRS H
HP0879	1067	CCCTAGCGGAGGGTAAAGCACCCCTTACAAAGTATTGCAAGAAAAATCCCAAAACCCATTTTCCCTTCCAC CACCAAGGAGGAGCCGAGAGGGCGAAGTTGATGGCTGCATTATAATTTGTAGCGAAGAAATTCAAACAAG GCATAGAAAAGGGCAGTTTTAGAAATGGCAATCGTGCATAACCACTACTATGGCACCTCTAAATCCCTGTAGAA AAGCCTTAAAGAGGGCAAAATCGTCAATTTTGATGATGCAAGGGCATGAGATCCTTAAAGAACATTACCCCT AAGCATGCTCTGTGTTTATTAGCACCAAAACCAAGAGATTTAAAGAGCGTTTGTCTTTAAGGGGACGGATTCT AAAGAGACGATAGAAAACGCTTGATCAACGCTTATAAGAAATGCAGTGGCTTGAGAGCGTTTGTATACCTCATC AATGAAGATTTAGAAAAATCCAAAGAAATCATCTTAAAGCATCGCTAAACCTTAGTCCATCGCTTAAAGCGTTTAAAT TTGAAAAAATCTGTAGGCTTGGAACCAACGAAACCCCTATAAACCTATCAATTTATTTTAAAGCTATAATCAAAC AAAAACCAACCAATAAGATTAGGAGTAAAGTATGGCGGATTACAAAGCATATGGCATTTGGTCAATTTGTTTATTAG	1068	PSGAGKSTLTKYLQEKIPKTHFSLSTTT RKPREGVDGLHYNFVSEEEFKQGIEK GQLEWAIVHNHYGTSKIPVEKALKE GKIVFIDVQGHLEIKKHYPNACSVFIS TKNQEILKERLLRGTDKSKETIEKRLINA YKEMQCLESFDYLIINEDLEKSKIEILSIA KTLVHRLKAFNFEKICKAWKNETL
HP0879	1069	CCACCATTAAGAAATTTTCTACCCCAAGCAGTTCTAGGTGTATCCATCCAGAGACTCTAGAGCGTTAAGCATT GAGAGGGGCAAGATTGCAAGCTTTCTGATAATTATAAATCTGTGGAGTGGTAGCGCTAAAGAGATTGCAAAAT GGCAATGCCGTGCCGCTTTATTGAGTGTAGCGCTCGCGAGCGGCTTTGACTTTTAAAGGGGTAAAGATGTTTA ACAATAATGACTTTAAGGATTACAGAAATTTACTGGGTTTTGGTTCCGCAAAATCGGTTTAAAGGAAATTTTAGCGCTAA AGACATAACAACCTTGCGTTGATTCAATGATTAAACGCGCTCAAAAAAGGCTTATTGAAATTTTAGCGCTATCAAT AGTATTTATTGTTTAAATATAATGAGTATGAATGGAATGCTTTTAAAACTCCATAGAGCGAGTGTTCCTCAAGAT AGTGGACACTCATATTATTATAAGCTGAATAATCAAGGCAGAACCTGAAGAGTTTGTCTTTCTTGGATCGCTGG GTTTTAGTAGCGGAGTTTTTAAAGGATTTTATCGCTTGTCTTTTATGCTCAAAAAGAAACCATCAAAATTTTGGT GGTGATAATTTGAGAACATAGAAAGTTTTAAAGAAAGTCTTAAAGCGGATTTTGT	1070	TTTRNFSTPSSSRCHPRDSRALSIREG ARLQSFDPDNYKFCGSGSAKRLQIGNA VPPLLSVALAQAVDFDLKG

HP0879	1071	CAGTCAGGTCGGATGCGCATTTAGACATCGCCCTACGATTATTGAATTAGTCGCCCTAAAGGCTTCAATTGCTGA GTTTTGGGAAGCCCTTATTTCTAACAAATACAAACCCCAAGCCCAATACCGCTAGGCTATGAAGCG ATCGCTACCAAGATTATTTTATAACCAAGTTGGGTTAAGTATTGAACGAAGCCCTAAGAGCCCAAGGAT AACAAACGACAAATAGAGCTTCTAAGTTTATCAGCAATTAGATCTTTGAAGCCCTTAGTTACTTGTCTCT ATCATGGGCTAATCTTAAGATTGACAACTAGGTTTATCCATTAAACGCGATGATTTTGTCTACAATAATAGGAT TTTAATTATATAAGGACAAATGGCATGCCAATAGGGCGTTGTTTATTAGCGGGCAAGCGCTAGCTGATAATA TAGAAAAAGATTGAAACATAAAATCCAAATATAACCGCACAAACGCATAACGCCCAACTAGCCGTGATTTTAG TGGGAAAGATCCCGCTAGTATCATTATGTCATATGAAGTCAAGCATGCGAAAGGTTGGCATGGATTTTGAC TTAAAAACCCCTCAAGAAATATTACTGAAGCCAAATGCTATCCTTGATTAAAGATTACAATACCGATCAAAACATTT CAGGCGTTTTAGTCCAGTCCCTTTGCCAGACACATTGATACTAAATGATTTTAGAGCCATTGACCCAAACAAG ATGTGGATGGTTCCACCCCTTAATATCGGTAAAGCTCTGCACTCAAAAGAAATCGTTTCTGCCAGCCACCCCTATG GGCGTGATGGGCTTTTAGAGCATTACCATATTGAATCAAGGGTAAGGATGTGGCGATTATTGGAGCGAGCAATAT CATTGGCAACCTTTAAGCA	1072	SQVGSGLDIAPTIELVAPKGFQFVSFG KPLFSNNTTNPSPHPNYALGYEAIATK DYFYNPSLGLRYLNEPKPKDKQND KIEASKFYQQLESKALSYYLLYHGANL KD
HP0879	1073	GCCTAATCGTAACGCTATTTTATCACCCCTTTTGCATTCACGCGCAAAACTAGGGCTAGCAATATCGCTTAGG AGTTTCGCAAGCGGATTTAGCGGCTATCGGATGTAAAGAAATTTTATAAAGCATCGAGCATGCCCTTAAATTT AGGATCAACACGCGGATTAATCTCAAGCCCTTAATGTTTTGAATAAGCGCAAGAAATTTCAATGGCTAAAGA TTTGGGCTCTTGATTTAGTCATCAAGAAACGACACCTGCTATCAAGGAGAGCGAAAGATTTTGCATGCTTATG GTTATGGTTGCGATAAATGCCCGCATGCCAATTGAGAAATAAGGCTTTGAAGAGTTTCAAGCTAATAAAAAATAAG GTTTTTAAAAACCAACTAAAGAGCGGTAAAGCGGTGTTTTAATGTTTTTAAAGTTATATGTTAGTTAAGATA AACGCTCACACTCTTTTATAATCCAATTTATCCCATATATCGCTATAGTAATGACTTTAAACGCTGGCACTTTA ACCCCTAATTCACACTAGAACCTCCAGATAGATTTCATCGCCATAGCGATCAATATCGTATTCATCATTTCCAAC GAACGCCAAATTTCTTGCACTGAAATCGTGCGACTCTTGACTTGATTGAAAGGGTGAGATTGTTACTTGCAA ACCAAGTGCTACCCCTAGTCCATGCCAATCACAAGCCCTGAAGATTTTCTAATACATGCTTGATGCTTTTTTAA TGATTAGGCTAGCGTCTGCCGTCATATCTTTGTAATATAGAGAGCCCTTTTACCCTTCGTTCAACATATTTT TGGACGCTCGCTTATCGTTAGTCCAATTAATGAGCAATCCGTATTGAACCATAGGGTAAAAAAACGATTAAACCG CTACGAGGAACAGAACCAACGCGCACCAAGT	1074	PNRNAIFITLLHSAQKLGASNIALGVS QADFGYPDCCKEDFIKSIEHALNLGSN TAIKILTPLMFLNKAQEFQMAKDLGVLD LVIKETHTCYQGERKILHAYGYGCDKC PACQLRKKGFEEFQANKK
HP0879	1075	TTACGGCGATAAAGACACACCGCTTTTTTAGTGAAAAAAACATAGAATGTTGAAAGCTATTAGATAAAGTGG ATCGGATCATTTGCTGAAGCCACATGCGCTAGCATGCTCAACGATTATTACAAGGTGTTTTTGGCGCAAAA GATAAGGATTGTATGTGAAGCGCTTGAAAAAATCAGCCCTAAATCTATCTGGCGAGCGTGTTTTAGAGAAACAC ACCCCTTAAAAAGTCTTTAGAAAAATCCCTAAGGGAAAAAAGAGACTATCACCTATCAACCCCTTGTCATGCC AAAAAACCCCTAACGCTCACAAGAGAGTGGCAACTTGCTCAATTTGCATTATGAATTAAGAAATGCCGGACAAT TGTTGGGTTTTGGGGGATTACGATGCAACACAAAAAGCGGATTTCTTTAAAGTGGGCTTCTTAGGGCTAA AGAAATCATAGACACCAAGCTGCAATTTTGAAGCGTGAATGCGGGCATGCCATATGCAATTAACAACGCTTTAA AGTCTTTAGACGACCCCTAACACTCCGCAATTTTGACCCCTTTAGAACTCATCGCTAAAGCCTTAAAGCGCTGAAT AAAAAGCCTTTTAAACCCCTTCTCAACATCTTTTATATAACAGAGCTTTA	1076	TGDKDTTLFLVKKNIEWFESYLDKVDAL IVPEATCASMLINDYKYKVLGEKDKOLY VKRLEKITPKIYLASVFLKHTPLKSLLE KIPKGKKEITYHNPCCHAKKTLNAHKEV RNLLNLHYEIKEMPNDNCCGFGGITMQT QKAGFSLKVGILLRAKEIIDTKAAILSAEC GACHMQLNNALKSLDDPNTPPFLHPL ELIAKALKSAE
HP0879	1077	GCCAAATCCCTTAAAGACTTGAATGCCTTATTAGAAAAATGAACCCACGCGCTTGAATGCTCTTTAACATTCA ACGCTCTAGATGAAAAACCTTAAACGACAACTTAAATGCGATTGACTAATCGGAAATATCTTGTCTACACTTT TTTTCAAGAGGTTTAAATGGAGGCTCAAGAAATCTATCCCTTAAAAATATTTTAAAAACCTTGAGTTCTAAAGAGCGT AAAGCCATAGAAGAGTTGCAAGACAACTGCGTTTTTCAGCGCCAAAGTTGGCGTTTCTATCCAAGCGCACCATCT TAAAAACCTTTTGAAGCCCTTTATACCAAAATAAAGAGAGTTTGGGCTTTTTTCCCTTATTTAGTTGCGGATCT CAAACCCCTAGCGTCTCTTATGAAAGCGGCTTAGCTTCTTAGAAAACTATTTTATGGCTTTGTTCCAAT	1078	QIPLKDLNALLEKMKPTRLNCSLTFNAL DEKTLNDNLKCDLTNAENILAYTFFQE GLMEAQENLSLKNIFKTLSSKDAKAEIE LQDKLRFSAAPKLGVSIAQHHLKNLLEAF YHQNKESLGFSPYFSLRSQTPSVSYE SALASLENYFMALFQ

HP0879	1079	TTATGACACCACCAAGCAACAAAACGCCCTAAATAATTGAAAATATCCCCACGATCAAGAGCGCTCTAAAAACCATTTT GGTGGTAGATGAATCGTAGATAGCGGTAACTCTTTAGAGCGGTGCTTAAGTGTAGAGAGAAAACACCCCGATA AAAAATTTATAGCGCGAGTTTGTCCAAAAACAAGCGGAATACAAAGCCGATCGTTTTTAAAGACGCTCCTG AATGGATTGATTTCTTTGGGAAGTGGAATGAAAACCTTAAAGAACCTTAACATGCAAGTTAAAGAAAACAACAAC TCTGCTTAATTTCAATTAGGTTGCTCTAAATAATTTGGTGATTCAGAGGTGATGTTAGGCAAGCTTTATAATTACACGCT CACTAATGACGCTAAGAGCGCTGATGTTGATCAACACCTTGCGGGT	1080	YDTTKQQNALKIENIPTIKERLKTILVVD EIVDSGNSLEAVLKVLEIEKHPDKKFYS ASLFQKTSAKYKADAFKDAPEWIDFF WEVDLKNLKSH
HP0879	1081	TTGGCCCTTTACGAGCGGGCTAAGGATATTTGGACAGCTTGATGAATGCTCCCGTAGTTCAAAAAGAAAAAT GCATCAAGGATAAAAAGGCATGCATTTTATCAATAGAGCGTTGTAAGCCCCATGCGAGATAAAATCACCAAG AAGAGTATTTAAATCGCTAAGAAATGTTTAGAAATGATTGAAATAAGACAGGCTCATCAAGGAGCTTGAATTA AATGGAGCGCTTCTAATAACTTGCGTTTGAAGAACCCCTAATTTACAGGGACAGGATTGCAAAATCCAAAAAT CGCCCTTTCACCTTGATGGATTTAGCCAACTCTATGATTGGATATTTTGTCTTTATGCGCAAGCAATAAAGC GGTGTAGTGAAAATGTTTCATGCGTGGGGTAAATCATTTCTCAGCGTTTGAAAAATCCACTCTCTTAATGGGT TGACACTGATGAAGCGATGAACAAGCCATTATCAATCATTAACCAATCGCATTTGCTTTGATGCCAGAACAGATTT ATTGAACGCTTGCTCTAATGAACGCTTAAGAAATGCAAGAAATTTATCTCTACCAATACTCTAAAAATCGCTCT AGCATTCCTAAAAGGCGACAGCTCGCTTAATAGAAATCGCTATGAAAACGCTCAAGAGATTTTAGCCAAAGAA AAACCTCTAATGAAGATCTGATTTAGAGAAAGCGGATCGCTCTTAATAGAGTGCATGCCTTATAGGGTAGAA ATCTTTGACACAAAGCCACCATCTAGCAGCCCAATGGTGGGGAATGTCGTGTATGAAACACGCTTCCAAAA AAACTCTTATCGGCGCTACCATTTAAAGGCTCTGATGAATACACTCAATGAGCGAATGCTCACCAGAGGCTTT AGACTTTGCCAAAGAGCCACCGCTTAATTTGTGGTGATCGATGGAGGGGCACAAATTAACATCGCTTTAGAAA TTTTAAAAAG	1082	GPFTSGAKDILDSL YELI.PLVQKKNCKIK DKKACIFYQIERCKAPCENKITKEEYKI AKECLEMIENKDRLIKEL ELKMERLSNN LRFEEALYRDRIAKIQKIAPFTCMDLAK LYDLIDIFAFYGASNKAVI.VKMFMRGGK IISSAFEKIHSLNGFDTDEAMKQAIINH QSHLPLMPEQILLNACSNETLKELEFI SHQYSKKIALSIPKKGDK:LALIEIAMKNA QEIFSQEKTSNEDLILEEARSFKLECM PYRVEIFDTSIHSSSQCVGGMVYEN NAFQKNSYRRYHLKGSDEYTMSELL TRRALDFAKEPPPNLWVIDGGRAQLNI ALEILKSSGSFVEVIAISKEKRDASKAYR SKGGAKDIIHTPSDTFKLLPSDKRLQW VQKL RDESHRYAINFHRSTKLKNMKQI ALLKEKGIGEASVKLLDYFGSFEAIEK ASEQEKNAVLKKRI
HP0879	1083	AAGAGCCTAAGCAAGATGGAGCCAGAACGGCAGTCGTGCATAAAGATGGGTCCATTTAGATGGTGGCCCTTGG GTATAAAGTGCCCTGCTTCAAGCATAAAGATCAAGTCGCCCTTAGACGCACTAAGTAGGCTTTTAGCGAAGGCAAAA GCTCGTGGTGCAGGCGGAATAGTGGAATAAAAACGCTTGCTTCTCAAGCTTCTCGCACAAACATGCAATTACAA GATGAAAGCGGTGTTTTATTCAATTGCGGGGTAACTCCTAATGTCAAAGCCGAAGCCTTACAAAAAGAAATCGTAGC GCTTTTAGAAAAGCTGAAAAGGCGGAAATCACTCAAGCGGAATAGACAAAGCTCAAAATCAATCAAAAAGCTGACTT TATTTCTAATTTAGAAAGTTCTAGCGATGTTGCGGGGCTTTTGGGACTATTAGTGCAAAACGATATTCAGGGCTT GACGGATTACCAGCGACAATTTTGGATTTAAAGTGAGCGATTTGGTGGCTGTGGCCAATGAATATTTTAAAGACAC CCAATCAACCACCGTGTGTTTGAACCTTAAAGAGCCCTTAAACATGCAATTTTCAATCATAGCGCGTTGATTACG CCTTTTAAAGATTTGAGCGTTGATGAGCGCGCTTATGAAACCTTGATCAAGCGCCAAATTTTTCAGGGCATGGAC GCATGCGTGCCTGTTGGCACGACAGGAGATCCGCCACGCTCACCCACAAAGAGCACATGCGTTGCATTGAAATCG CCATAGAACTTGCAAAAACACTAAAACGCCCTCAAAATTCGCGCATGAAAGTTAGCCGGCGTGGCGAGTAACGC CACGAGCGAGTCCCTTCTTTAGCAAGTTCGCTCAAAAATCGCGCGGATGCGATTTTATGCGTAAGCCCTTATT ATAACCGCCCCACCCACAAGGCTTGTGTAACATTATAAACCATCGC	1084	EPKQDGGARTAVWHKDG/VHLEWVALGY KVPAFKHKDQVALDALSRLLGEGKSS WLOSELVDKKRLASQAF:SHNMQLQDE SVFLFIAGGNPNVKAEL.QKEIVALLEK LKKGEITQAECLKINQKADFISNLES SSDVAGLFADYLVQNDIQGLTDYQRQF LDLKVSDLVRVANEYFKJDTQSTTVFLK P

HP0879	1085	AGAAATCAACAAGGATTAAAGGGTTCGATTACGCTACCGATGTTTTGAGCTTCCCTTTAGAACCCATTCTCACAC CCCTTTAGGAGCGTGGTGAATTAATCGCCATTAGCTCAAACTAACGCTCTGAAATTAGGACATAGCTTAGAAAATG AGATCGCTCTTTTATTCATTATGCGGTGTTGCATTTGTTGGCTATGACCATGAAAAAGATAAGGCGCAACACGC CAAAAGAGAGCGAACTCATTAAGCGTTTAACTTCCCTTTGAGTTGATTGAACGCACACAGGATTAGGTTTAGATA CTCTACTAATGCTGACAAATAAAGCTTTTAAATTTTAAAGATGGAATTTTAAAGATTGAAAAATGCTTTTGGAAATTT TTCAAAGCCCTTCATAATAATACGACTCGGTGATGCCCTTAAAGAGTTAAGGATCGTTGGTATTAGAACTCAAAT GCTTTTAAAGCGTTTGAATTCCTTCAATCATTACAGGACTCCTTCCATTGCGCTCAATAAGCGCTTTATCAAT CCTATCCCAAGCAGGATTTTTCATTCCTTCTTAAGCAACAAATCAAGCCATATCCTAGTCTGCTGCCATTACCC TCCAAAAGGGTGAGCGATATTCACACATATTTTCTAGCATTTGATTGAAATATTTTGGCGCATGCTCTCAA TTCTGGGTAAATCAAAATCAAAATACAGCAGTTAGCGAACCTGAAATTCCTTTAGCAATGTTTTATCCCTGATTTT CCCAGCAATTCATACAACTTCAACCAAAACCGATGATTTCTGCAAGCCCTTGAATGTCCTACTTCTATGGT GTCAATCAGACCGCTTTGGATCAAGTGCCTGCTTTCTAACTCTGCCCTGCTAAATGCATCGCGCTGATTTTT	1086	EINKDLRGCDYATDVLSPLEAIPHTPL GSWINAPLAQTNALKLGHSLNEIAL FIHGVHLHLLGYDHEKDKGEQRQKESL IKAFNLPLSLIERTQD
HP0879	1087	CACGCTTCCATAGGTGCGATAAGCCCGCAAGATGAAAAATTGCTCGCTCTAAAGAGAGCTTGATGCATGCCA TTAATTCAATTAGAGTGGCATGCAATTTAAAGAGTTGAGTCAGATTTAGAGAGCACTATTACAGAAAGGGCTTTG TGCCCTTGAAGGATTTGCGGGCATGGCATTTGTTAAACCCCATTAAGAGAGCCAGAGATCCCAACTACCTAGAA AAAGCGTCAAACTTAATAGCGGCCCTAAATCAAAAGAGGGCATGGTATTTTCTAGAGCCTATGGTGTGTCAAAA ACAGGGCGAGCCTAAATACTA	1088	TLPIGAISPQDEKLLACSKESLMHAINSI RVGMHFKELSQILESTTITERGFVPLKGF CGHGIGKKPHEEPEIPNYLEKGVKPN GPKIKEGMVFCLEPMVCQKQGEPKIL
HP0879	1089	CCCCCAAAGGGCGAGAAAGCACCCCTGAGGGCAATTTCAATTGACACGAGCGATATTTATTCATTTGTG CTGAGCGTTTATGAGGTAGCTGAATCATTAATAAACCGCACGAGATGTGTTGGTTTCACTCAAGAAAG ATGAGCAAAAAGAGCAAGAGCGATCTTGCAATTTAGTCCAAACCCCATGACCTGGTTACTTATGGCTTATCCCTGA GCTTATTGGCGGTTTTCGCGGTTTAAAGCAGCTAGATAGCATCAGTTTAAAGCGGATGGTGATATTTACAAAACCC TAAAACGCTCTTATCAAGCAATACAGCAGCTTTTCAAAATGGATGAGTGGATTTGATCTTGAAGAAAGAGCCAT TAAAGAAATCGCTCACTCGCATAGAAAGAAACCGGGCTAGGGCTTAAGGGCGATCATTTGAAGATTTTGTGTT TGGATATTATGTTGATTTACCAAGCTTAAAGGATCGGAGTGCCTATCACTAAAGATTGTGTTTAAACAGGCTG AACCTTTGATCATTTGCTAAACCGCATTTCAAAATCTTCCCTTAAGGAACCGCTTAAATTAACGATAAAGGATTAG AAAGGCGATGATTTTAGCAATTTGATCGTTTTCGATGATTTGCCATAGATTAGGACGGCTAACACGAT CGTGTAGTCAAGGCGAGGCGATTTATCAATGAGCTTCTATTGCGGCTGCGCATGGGATTGTTTGATTTCTA AAGCTTATGATATTTGGCAGTGGGAGCGGAGGCTAAAGAAATGCTAGGCAAAACCCCTAACAGCATCAGAGCGATT CGCCCCATGAAAGATGGCGT	1090	PPKGGGRKHPEGNFIQIDTSDILFICAGA FDGLAEIHKRTTQNVLTGFTQEKMSKK EQEAILHLVQTHDLVTYGLIPELIGRLPV LSTLDSISLEAMVDILQPKNALIKQYQ QLFKMDEVDLIFEAAKEIAQLALERKT GARGLRAIIEFCLDMFDLPKLKGVSEV RITKDCVLKQAEPLIAKTHSKILP
HP0879	1091	CATTAAATCAAGGCTTTGTTACAAGAGAGATGGAACGCGATGCAAGAGGGCTTGAAATTAGAAACGCTACTA AGGAGCGCACCAAAAACCTCCCATTAAGCATGGAATTTGCCCTTTATGTTATGAATCATCAAAAACCATG CCAAATCTCCAACTGAGAGTCATTATCAATGAGGGGAAACAGAGAAATGAGCGGTTTTTTCGTTTTTAAAG CTGGAGTGTGGATTAAAGCGCGTTCTGTTTGTGTTTGAATTTGAATGCTTCCCGTAGGGAAATGCGTTTT CTAAACCGCCCAAGATACATGATGCTGCTTATGGCTAATGCGGCTAATGTTAAAGGGGATTAGCTTACGAG TTATGCTATACCTCAAGTTGGGGAAATAAAATAGGATTATCATGTCAAGAAATGATTAAACGGGAAGATTACGC AGAGAAAATCGCTCATCAAGCGGTGGTGAATGTGGGGCGAGCTGGTGGCGGATTGCAGAAAGATTGAGCC GA	1092	IKIQGFVREMENAMQEGKLENATKG AHQKTIKSMEFAPFIGYIHKHAKYS KLRVINEGKNRELRRFFAFFNAGVLDL RRVRYGFVNALPVGKMRFLNRQY NELHAFMANAANVKGD
HP0879	1093	CTTTGGAAGAAATTTAGCCCTAAACCATCGCTTTAAGCTTTAGCGGGATAAATCTTTAACAGTGCAGCGG GCATTATTATGGGCAAAAGAACGGTTGAAGCGTTAAACACCAACCCCTTTATAGAGTTTTAAGGTGGTAA ATCAGCTCACCTTGTCTTTTGCAGCTAAAGCATGATAAATCATCAAGAGACATTAACAATCATCGGTTATTG AACCAAACTAAAGACGCAATTTATGCAAAAAGCCCTCAAACTCTACGCTCTTTAAAGCCTTTAGAAATGAATGTGAGC ATAGCCTCTAGCTTTCTAAATAGGGAATTTGTTGGTAGGGAATAGAATCCTTTTGGTGAATCCAGCCCAAA AACACCCGTGCTTTAATAGTGAAGAACTTTATTAAGCTTTTCCAAAAGGCGTTATCGCAAGGATTTCTATCGGAA TTCGTGTGCTTTGAAGCTTTAGCTTGAATGAAAAAGATTTTGAATAATCGCTCTGTTTGAAGAAATTTCTTAATA AAGCTTAAAAATCGCTATAATAAAATTTCTTTAAACGGCCATATCCCCCAAAA	1094	LEEILAKPSLLSFSADKFFNSAQAGIIM GQKERVEALKNHPLYRVLRVGKITLTL FCSLKAWINHQEDITHALLNQTKDALL QKALKLYALLKPLELNVSIASSFSKIGNL FGRELESFCVKIQPKNTRALNSEKLYL KLFQKGVIARISCEFCFEVFSLNEKDF EKIALVLEEILNKA

HP0879	1095	CTCGTTTATTAACCTTGTAGGGAAATCTCGCTAAAGCTCAGCAACGCTGGAAAAACCGCTTAGCGAATTT TTTTCCACCACCTGGGAAGATAAGAAACCCCTTAAGGGCAACCTTAATGTGATTGATTTGCCGGGTTTGCTA CGCTAAAGTTCTAAAGCTTGAAGAAAGAAATGGAGGGGTTTTATGGGAATGTTGAGCGTTAGGGTTCTATCAA ACTTTTATCCATTTAGTGGATGCACGCCATTTGGATTTAGAAATGATAAAACGCTAAAGAAACATTTCAAGCCCTT TTAAGGCCCCGATCAAGCCTACCTTCTCTCTTTTACGAAATTTGACAAGTTGAATAAAACGAGCAACACCGCCTTTT TAAACGCTCCTAAACCTTTTATCAATACCGCCCATTTTAAACGCTCTTCTTCAAAATACCCCAACCTTGAATCGT GCGCAAAACCTTTTGAACACCTTGCCTCACTAACCCATTATAAGCCGCAAAACCATGCTCTCTTAAACAAGATTC CTTTTTTCTTATGTTAGGAATCCTGGGTTTTATTTTATAGCCTTTTGAAGGATTAATGCCCTTTTACCCCAA TGATTGGGTTTTTATCTTTTATCGGAAAAATACGATCATTTTACCAAGTTTGAAGCGTTTGAAGCTTTGTTGTT TGGTTGAGAGCATGCATTTAAAGACTTTAGGCGTTTATGCTTTTATGTTTTTAACTACCATCAAAATCGCTATAAA ACTTTTAAAGCTTTTATGACGGCTTTTATCAAAACCTTTCATGTTTTTGGTTTATTACCTTTATTATC	1096	SFINTLLGKNLAKSSATPGKTRLANFFS TTWEDKENALRATFNVIDLFGFGYAKV SKSLKKEWEGFLWELLSVRVSIKLFHIL VDARHLDLEIDKNAKENIQALLRPDQA YLSLFTKFDKLNKNEQHRLFLNAPKPF LINTAHFNALSSKYPTLEIVFRQTLKHL TNPL
HP1238	1097	GGGAAGTATCGGTAGTATGGCAACCTTATTGAAGGTTTTAGTGGCAGCCATTGAGTTCTCTGTGCCAATTGTCA ATAGCCGTAAAGGATATTGATCACATAATTGAAGCATATTAGAACCCTTGCATCGCACTAAAGCGGGTATCCGGGA GTGAGCTTATCATTTTCCCTGAGTATAGCACGCAAGTTGAATACCGTAAGTGGCTTAGCGAAGAGTTTTTATTA GATGCCCGGTAAAGAGACAGAGCTACGTAAGCGGTGAAGAGCGGAAAGTTTATGGTGTGTTTTTCAATCAT GGAACGCAATCCTGATTCTAACAAACCCCTACACACCGCCATTATCATTTGATCCGCAAGGTGAATCATTTTAA ATACCGCAAGCTATTCCCATGGAATCCCATTTGAGCCATGTTATCCTGGGATTTAGGAATGCCGTGTGCGAGGGT CCGGCGGATCAAAATAGCCGTGTCATTTGCCATGACGGCATGATTCAGAGCTCGCCAGAGAAAGCGGCTATA AAGGTTGCAATGTGATATACCGTGAGCGTGAATTTAGCCGGCTATGATAATGTCTTTTACTACTTTGGTGAGG ACGATGGCACAATTTGATGATACCGTGAGCGTGAATTTAGCCGGCTATGATAATGTCTTTTACTACTTTGGTGAGG GGCAATCTGTAACTTTGATGGCAGACTCTTGTCAAGGCGACCGCAACCTTGGGAGATTGTAACCGGGAAAT CTATCCAAATGGCAGACACGCTCGCTTAAGCTGGGATTAGAAACAACATTTACAACCTAGGCCATAGAGGGT ATGTGGCTAAACCGGGGAGAACATGACGAGGCTTAACCTATATCAAGACTTAGCGGCGGTAAATACAAATTG CCTTGGGAAGATCACATGAAATCAAGACGGCTCTATTATGGCTACCTACCACCGTGGCGTTTTGGGAAATA ATCCCTAACCTTGCATTTTGC	1098	GSIGSMGKPIEGFLVAAIQFPVPIVNSR KDIDHNIESIIRTLHATKAGYPGVELIFP EYSTQGLNTAKWLSEEFLLDVPKETE LYAKACKEAKVYGVFSIMERNPDNKN PYNTAIIDPQGEIILKYRKLFPWNPIEP WYPGDLGMPVCEGPGGSKLAVCICH GMIPELAREAAKYGCNVYIFISGYSTQ VNDQWILTNRSAWHLNLMYTVSVNLA GYDNVFFYFGEQGICNFDGTTLVQGH RNPWEIVTGEIYPKMADNARLSWGLE NNIYNLGHRYVAKPGGEHDAGLTYYK DLAAGKYKLPWEDHMKIKDGSYGYPT TGGRF GK
HP1238	1099	TGAAGCTCAAAAGAAACCCCAATCCAATCAACCGCTAAAGAAATGAAAGTCAAGTCCATTCTTATGTCGGGCT TTCTTACATGCTGACATGCTCGCTAATGAATTTGAAGATTGTTGGCGGATATTGTGATTCTAATAAAATAGA CACCGCTGTTTGGCTTTGTTCAATCAAGGTTATTTAAAGACGTTTATGCCACCTTTGAAAGCGGCTATTAGAGTT TCATTTTATGAAAGAGCCAGGATTGCCGGGTAGAAATCAAGGTTATGGACTGAAAGAGGAAAGACGGCTTAA AATCCCAATGGGATCAAAAGGGCGACACCTTTGATGAGCAAAATTAGAGCATGCTAAACGGCTTTAAAAACC GCTTAGAGGGCAGGCTATTATGGGAGCGTGTGGAGTGCGCACAGAAAGGTGAGTGAAGGTTAAACCGC ATCGTGTGTTGATGTAATAGGGGGATAGCATTTATATCAACAATCCATTATGAGGGAAGCGGAAATTAACCGC CGCATGATTGAATCTTTGAGTGGCAACAAGCAACGAGATTTCATGGGCTGATGTGGGCTTGAATGACGGGAAAT GCGTTTAGATCAACTAGATACGATTCTATGCGTATCCAGATGTGATATGCGTAGGGGTTACTTAGACGCTCATAT TTCCTCGCTTTTGAACGGGATTTTCTACCCATGACGCTAAGCTTCAATTAAGTCAAGAGGGATCCAATAC AGGATTTAGACATTTTAAATAGAGATTGACAACCCGCTAGTCCCTTAAACCTTAGAAAAAGCGCTTAAAGTGAA AGGAAAGATGCTCTTAATTTAGGCAATTAAGAGCGGATGCGCAAAATTTAAAAACCGAAATCGCCGATAAGGTTAT GCGTTTGGGTTGGTGAAGCCGACTTGATAAAGATGAAAAAACCGGCTTGTGAAAGTCAATTTATCGTATTGAAAGT GGCGGATATGGTGAT	1100	EAQKETPOSNQTPKEMKVIISIVVGLS YMSDMLANEIVKIRVGDIVDSKKIDTAV LALFNQGYFKDVYATFEGGILEFHFDE KARIAGVEIKGYGTEKEKDGLKSMGI KKGDTFDEQKLEHAKTALKTALEGQG YYGSWEVTRTEKVSEGALLVFDVNRG DSIYKQSIYEGSAKLKRRMIESLSANK QRDFMGWMMWGLNDGKLRDQLEYDS MRIQDVYMRRGYLDHAISSPFLKTDFS THDAKLHYKVKEGIQYRISDILIEDNPV VPLKTEKALKVKRKDVFNIEHLRADA QILKTEIADKGYAFVAVKPD_DKDEKN GLVKVIYRIEVDWMVYINDV.ISGNQRT SDRIIRRELLGPKDKYNLTKLNRSENS LRRLGFFSKVKEEKRVNSSLMDLLVS VEEGRTGQLQFLGLGYGSYGGLMLNG SVSERNLFGTGQSMMSLYANIATGGGR SYPGMPKGAGRMFAGNLSLTNPRIFD SWYSSTINLYADYRISYQYIQQGGGFG VNVGRM

HP1238	1101	ATAGATTTAAAGGATAGTTGGTTAAATCAGCGTGCCTGAAAGTATTTGAACGAGTTTAAAGTGGGTAAGGAATTT GAAGGCTATATCCCGCGTTGAAAAAAGCAGCAATTCAGGGTCAATATTTGAGCGTGATGGGGATTTTGGCAGC TTGGAAAGCGACGAATATTTCCAACTTACGACATGAAAGCTATGAAGTGAAGCCATACCCCTTAGAAGAGTTGG AAAATTTTAGGGTAGGGATGAGCGTGTAGTTACCATTAACCTTAAAGGATTGTTTGTTCAGATTGATAAGCGC ATGGGTTTTACAAGACAAGTTCTTGTATCGTGTGTTTATATGCTTTTGTAGGGTTTAGGCACGCAATC TTTAAACAAGAAATCCCAAGACAGCTCCCTATCGTGTGGTGGATTGGATAAGACCACGACCAAGCCATCAAGTAGC GTTTGAATTAGGTGCAACGAGCGCGCTTCAATCAACACCAAGTGCTAGCCCTTTAGAAGCCAAACGCTTTTAA CTCCGCCGAAGCGTATGGGCGTTAGTTTGCCTAGAGATTAGAGAAAAAATCAAAATGGGCGAAAGGTAGATT TGCCCTTTTATTATAACGCTGAGTATGTTTAGTGGGAAACGCTCAAAACGCTTCTTACAAACGCTTTGACTT TAGACGCTAAACCTTAGCCACCAGCTTAGTGGAGATTCCAATTTGATTTCTGCTAAAGCCCAAGCAATGCCTA TTGTTTGCATTTGATGCCCTATACAAATGAAGAAACAAATACACGCAATACCTTTTAAAGCGTGATGTTGCGCTTGCAT GTGGCTCATTTTATTGCGATTGGCATGCTCAATTCATTCAAAAGCCTCAACATCGAGAGCTTTTGTGATCAGTATT GTAGCGAATGTGTGTGTTTAGTTTTGGGGATGGCATGGCGTTTATTTAATCTCATTGGCATGGAAGGGCA TTATGCGCATTT	1102	IDLKDSWLKISVPEKYLNFEKVGKEFEG YIPALKKSTKFRVKYLSVMGDFATWKA TNNSNTYDMKSYEVEAIPLELEENFRV GMSVLVTIKP
HP1444	1103	GAAGCCATTATTAATGAGCTTAAAAAGCGAGCAAAAAAGTGGCGGTAAAGAAATCACCACCAAGTGCGGACCAT TTCTGCAACTCCGATCACAAATATCGGGAACCTCATCGTGACGCTATGGAANAAGTGGTAAAGACGGCGTGATCA CCGTTGAAGAGCTAAGGCAATGAAGATGAACCTAGATGTTGTAGAAAGCATGCAATTTGATAGAGGCTACCTCTCC CCTATTGTAACAAACGCTGAGAAATGACCGCTCAATTTGGATAACGCTTACATCCTTTTAAACGGATAAAAAAATCT CTAGCATGAAAGACATTTCTCCGCTACTAGAAAAACCATGAAAGAGGGCAACCGCTTTTAAATCATCGCTGAAGAC ATTGAGGGCGAAGCTTAAACGACTCTAGTGGTGAATAAATTAAGAGCGGTGTTGAATATCGCAGCGGTTAAAGCTCC AGGCTTTGGGACAGAAAAAGAAATGCTCAAGACATCGCTATTTAACCGCGGTCAAGTTATTAGCGAAGAAAT TGGGCTTGAGCTAGAAAAAGCTGAAGTGGAGTTTGAAGCAAGCGGAGGATTGTGATTGACAAAGACAAACACC ACGATCGTAGATGGCAAGGCCATAGCCATGATGTCAAAGACAGAGTCGCGCAATCAAAACCCAAATTCGAAGCA CGACAAGCGATTATGACAAAGAAATTCGAAGAAAGTTGGCTAACTCTCTGCGGTGTGCTGTGATTAAAGTG GGCGTGGAGTGAAGTGAAGTGAAGAGAAAAAGACCGGTTGATGATGCGTGAAGCGGCTAAAGCGGCT GTTGAAGAAAGTATTGTGATTGGCGGCTGCGGCTCTCATTGCGCGGCTCAAAAGTGCATTTGAATTTGCACG ATGATGAAAAGTGGGCTATGAAATCATCATGCGCGCCATTAAAGCCCATTAGCTCAAATCGCTATCAATGCGCGGT TATGATGGCGGTGTGTCGTGAATG	1104	EAINELKASKVKVGKEETQVATISAN SDHNIGKLIADAMEKVGKDGVTVEEAK GIEDELWVEGMQFDRGYLSPYFVTNA EKMTAQLDNAYILLTDKKISSMKDILPLL EKTMKEGKPLLIAEDIEGEALTTLVWNK LRGVNIAAVKAPGFGDRRKEMLKDIAI LTGGQVISEELGSLNAEVEFLGKAG RIVIDKNTTVDGKGHSHDVKDRVAQI KTQIASTTSDYDKEKLQERLAKLSGV AVIKVGAASEVEMKEKKDRVDDALSAT KAAVEEGVIGGGAALIRAAQKVHLNLH DDEKVGYEIMRAIKAPLAQIAINAGYD GGVWVNEVEKHEGHFGFNASNGKYVD MFKEGIIDPLKVERIALQNAVSVSSLLT TEATVHEL
HP1444	1105	AGAGCTAAACAGAGCCAAAGCAGAGCCACACAGAAATAAACTAAAGAAACAATAAGCCAAAGAAAGCAA AATTAAGAAAGCAAAATCAAGAAAGCTAAGCGAAAGAACCTATTCTGTAAAGCTTAGTTTAAATGAAGCGTTA GAAGAAATTGTCGCTAATTCCTTAAGCGATTGCGTTTCTTATGATCCATCAATCAATCAGCGCAAGTCCCCACT CTAGCCCAATCAAAAAAATCAAGAAATTGTGCCAAAAATACCAAAAGAAATTAGTCAGCTCTTCAGAAATACGCTAAA AACTCAATGCGATTGACAAGATTAAAAAACCGAAGAAAGCAAAAGTTTTAGATGAAGAAATTAGAGATGGCTAT GACTTTTGAAGAAAGGATTTTATAGAGTGGAGCAGAGCAGTAGCCAGTGCATGTATTGCGCGAAATGGG GGATATAAACTTTTAAAGCAAGATGAAGAGATTGAATTGAGCAAGCAAACTCCGCTGGGTGAAGACATTATTTAGA CGGATCTGCTCGGTGCGTATTGATTGATTATCTATCGGTAAAGACGCTTAAATCAATCGTGAAGAAAGGGT TAAAGAGCTTTTCAGGAGCTTTGATGATGACGATGAAATAGCGTGAGCGATTCTAAAAAGATGAAGACAAACGAAG AAGATGAAGAAACGAAGAAAGGAAAAAGTCTGTTCTGAAAAAGACAAAGCGGTGAGAAAAAGTTCAAGAAAGC TTTAAAGCCCTAGACAAAGGCTAAAAAGAAATGGCTTAAAGCCCTTGAAGCCCTATAGATGAAGAGAGACGAAAT GGTGGCTTCAATGACCTAGCTTACAAACGCCCAACACTCAAGACAGACTCTATGATTAGAACTACCAAGCAACT GATTAAATGATTAAGTCAAAACGATGGAACCACTTTTAAAGCGCGGATGGTTTGAAGAAAGATTGAAGACGCTTGG AATACAAACTGCCCT	1106	RAKTEAKAEATOENKTENNKAKESKI KESKIKEAKAKEPIPVKKLSFNEALEEL FANSLDCVSYESIQISAKVPTLAQIKKI KELCQKYQKKLVSSSEYAKKLNADIKI KTEEKQKVLDEELEDGYDFLKEKDFLE WSRSDSPVRMYLREMGDKLLSKDEEI ELSKQIRLGEDILDAICSVPYLIDFIYAY KDALINRERRVKELFRSFDDEENSVS DSKKDEEDNEEENEERKVVSEKDK KRVEKVQESFKALDKAKKEWLKALEAP IDEREDELVRSLTLAYKRQTLKDRLYDL EPTSKLINELVKMETTLTKSGDGFKEKEL KRLEYKLPFLNFDLTIANHKKILANITNMT K

HP1444	1107	CAGGCAAGCGGTCCAAGACACCATTAAGTGGTTTCAGATGTGAAGCAGGGAATTTTGGCGTGCATCAGCGCT GAGCCCGCAAGCCCTGATTTGAAAGAAATTGAGGACGCGCTAAATGGGATCATGGATTATTTGCAAGAAAGCGTAG GGACTCACATGCCAAGCATTTTCAAAATCTTTGAAAGCTATTCTGGTTGGATTTTAGAGCGCGGATCCAAACGCTT CGGCTAGGTTGAACTGGTTACTAACGCTTTAGGGCAAGAAATCCAAATAATGCTAGAACTTCTGCTAAATTTGCC AAAGATTTAGCGAAGCATAGCGGAATTTAAAGAGTGGTGCAAAATTTAGAAAAGCTTCAAACTCCCAACACAAA AGCTTGATGAAACTTCCAAACGATAGAAAATATCACCACTTCCATTCAAGGCGTGAGCTCTCAAAAGTGAAGCCAT GATTGAACAAAGGCAAGACATTTAAAGCATTTAGAAATCATTAGAGATATTGCTGATCAAAACCAATCTTTTAGCCTT AAAGCCGCTATTGAAGCCGCAAGGCGGAGCATGGCAGAGGCTTTGCGGTGGTGGCTGATGAGTAAAGAAA GCTCGCTGAAAGGACGCAAAATCGCTCAGCGAGATTGAAGCCAAATATCAATATTTAGTCAAGCATTTTCAAGACA CGAGCGAAAGCATTTAAACACAGGTTAAAGAGTGAAGAAATCAACGCTTCTATTGAAGCCTTAAGATCGGTTACT GAGGCAATCTAAATAATCGCTAGCGATTCTTTAGAAATCAGTCAAGAAATGACAAAGTTCTAACGATATTTTAGAA GATGTGAATAAAAGCAGTTTAAATGCTCATTCATATTTGCTGCTCAGTGGATAACCTCTATTTTAAAGAAAGGCTAA AGAGGCTTTTGGGGTGAAATAATTGTAGGTTTTTTTATAACCCCAATATCCACCCCTATAGCGGAATAGTTGCGG TTTAGAAGACGTGAACCGCA	1108	ROAVQDTIKVSDVKAGNFAYRITAEP ASPDLKELRDALNGIMDY.QESVGT PSIFKIFESYGLDFRGRIGNASGRVEL VTNALGQEIQKMLETSSNFAKDLANDS ANLKECVQNLKASNSQHKSLMETS TIENITTSIQGVSSQSEAMIEQGQDIKSI VEIRDIADQTNLLALNAAIEAARAGEHG RGFAVADEVKRLAERTQKSLSEIANI NILVQISDTSSEIKNQVKEVEEINASIE ALRSVTEGNLKIASDSLSIEISQEIDKVS DILEDVNNKKQF
HP1444	1109	GATTACGCTAACATGAGCGCTGAAGAGTGAAGCAGAGATTGAACGGCTGCTGAACAAACGCCAAGAGCCGATA AAGAACGAAGAGCTCAAAAACAAAGAAAGCCAAACCAACAAAGATTACCCCAACAAAGAAACCCCAAGCC CCTAAACCGAAACTAAAGCTAAGCTAAAGCCGATCTACTGAAGAAATAAGCCCTCTATTGGCGTGAGCAAC CGTTAGGTTGATGTGCGCGCTTGGATCATTGATGAATTAATCGCGAGCTTGTAGGGAAGATCGCTTCT TCAGGATTTATAGCGATGTGAAGAACGCTATGATGGGAAAGTTTTAGAGGAATTAACCAAGGTGCTCTCT ATTCAGCGGTAAACGACAGCTTGACGCTTGGGTGATGAACACACGATGCAACCAAGTGGTAAGGTGTTCAATAA ATTCCCTCGCATGTTAAGGATTGAGCCGGAAATTAGGCAAGAGCATTTGAATGATCATTGAGGCGCAAGAAACC GAATTAGACAAATCCATTGTAGAAGAGATTGGCGATCGCTCATCACATTATCCGCAACTCATGCGATCATGGGAT GAGCCTTTAGAAAGAAAGACGAAAGCTTAACAGCCCTGAACCGGTAAAGTGCAATTGAGCGCGTATAATGAGGGTAA CCACATTGTGATTAATCTCTGATGATGCAAGGGTTAGCCCTGTGATGCTTAAAGAAAGAGCGATTGAAAG GGGTGATTAGCGAAAGAGACGCTGAAGGCATGAGCGATAGGAGCGTTTAACTCATTTTCAAGCCAGGCTTTCT ACCGCAAAAGTCGTTTCCAATGTCTCAGGCAGGGGTGTTGGCATGGATGTGTGAACCAATATTGAAAGCTCAA TGGGATCATTAAGATTGATTCAAGAGTGGGGTAGGCACGACTCAAAAGCTTA	1110	DYANMSAEVEAEIERLLNKRQEADKE RRAQKKQEAQPKQEVPTKETPKAPK TETKAKAKADTEENKAPSIGVEQTVRV DVRRLDHLMLNIGELVLGKNRLIRYSD VEERYDGEKFLLEELNQV/SSISAVTTD LQLAVMKTRMQPVGVFNKFFPRMVRD LSRELKSIELIEGEETELDKSIVEEIGD PLIHIRNSCDHGIEPLEERKLNKPKETG KVQLSAYNEGNHIVIKISDDGKGLDPV MLKEKAIEKGVISERDAEIGMSDREAFN LIFKPGFSTAKVSVNVSGRGVGMVDVK TNIKLNIGIIEIDSEVGVGTTQKL
HP1444	1111	AAAGAGCTTGAAGAAAGCCCAATTTTAGAACAGAAAGAAATTTTAAAGAACAGCGCGCTGTTGTAAAGAA TCTCAAGCCAAAGCGCTAGACGCGATGCTCAATTACATGCTTATACTAAAGATGAAATTAAGCATGATTTTAGAG CAATTAGAAGAAATTAAGAGCCCAAAAGCGCTTAATCAGCGTTATGAAAGAAAGCCAAAGAGAGGGCAA GAAAAATCGTATGCCATTTAGCGGAAGCGACAGCCCGTTTTCGGGTAATTATGCGGCAGAGAAATTAACAACCTC GTATTGCTTTGCCCTGCTCAGATTATATCGGTGCTGTGATAGGCAAGACGGGAAATATTGAAGCGTTTAAAAAGG TCAGCGGGGTGATATAGAAATTTAGCGAAGATAGCAGCGAAATTGTTGTCCAGTTTCAATCTTTATCGCGGTAA GTAGCGAGCGAGACGCTTAAATTTTAAAGAGACGGCGTATCCAGCCTAACAGGATTGAAGAGGTTTATCATAG AGTCGCGCGCAACCTGAAAAAGAAATTTGCTTCTGAAGGGGAGAGCGGTGTTAGAAATTAGAGCTTGGAGCTATG GAAGATGAGCTTAAATTTTAAAGCAAAATGCGTTATCGCTCCAGTTTGGGCAAAACGCTTACAGCATTTCTAAA GAAGTCGCTCTTTAGCCGCTTATTGACAGCAGCTTGGGGGGGATAAAAACTCGCTAGAAGAGCCGCTATTT TGCAATGATTGTTAAAGCGCTCACCCCAAGAGCTTGGAGAGATCATGTGAATTTAGGGTTGAGGTGTGCAAGCG CCATAAAGAAAGATCCGGTTGTGATCAATGCGATTATGCCACCCTATGGCATGAAGAGATTTTGAAGCGTGGAGTCCG CGAGCGTGTGCGCGCTGATGCGCTTTTACGACGAGCGCTCTCTGGGCTAGGAGAAAGAGCGGATGAAGAAATAGGCTA AACGCTGCAAGCTTTAGAGAGA	1112	KELEKERQILEQEKENFKKQRAVCKES QAKALDAMLNMYMAYTKDEIKSMILEQL EELEAQKSAIRRYEKEAKEEGKKKS YAILAEATARFAGNYAAENLTTRIALPC SDYIGRVIGDKGNIEAFKKVSGVDIEF SEDSSSELCLSSFNLYRREVASETLKILI EDGRIQPNRIEEVYHRVARNLEKELLS EGESWYLELELGAMEDE.KILIGKMRY RSSFGQNALQHSKEVALLAGLIAEQLG GDKKLARRAGILHDIGKALTQELGRDH VNLGVEVCKRHKEDPW/INAIYAHGH EEILSVECASVCAADALSAGRPGARRK SDEEYAKRMQALEEIALIFDGVVEKAYA MESGRELRVIVKSNQVRDNQVPIARKI AKKIEESAQYVGEVGV

HP1444	1113	CAATTACCCAAAGCGGAGTGAGGCTAAACGAACGAGAGATTACGATCTAGACTATGCGATCGTCAAAGCGGAAAGA TTTAAACCAAGCTTTACACAGCGGAGCGCAAAAGAGAACGGACATGAACGAAGAGCAGATTAAAGCATTGCTG AAAATTTGATCCTAAAGAGATATTTGGTAGCGGAGGTTGAAGATTTACCGATCATCTACATGACGGGCAAGTGA TCGAGGAACCAACAGAAATCCAGGCATGCTAACTTCACGCCCTAAAGCCGTTTTCTTACGAGAGCGGATCAAG GAATACTACATAGACTTAAACCGGAGGAGTTGTTAGTAGAGTGCCACACAAAGCGCTAAACACACCGGAT CAACAATTTAGCGGCTTCATCCCAATCAAGGACGCTTCAATAGCAAGCGATCAGCTATAGCGTTTTAAGCCACT ATGAAGCCAAAGTTAAAGAAATAGACCAAAATAGACGCTGATAGCATCTACTCTAAACACATTGTTGCTAAAA TTTGAATTTGATAAGGCTACGCATCCTAATGTAAACCGATAGTAATTTAGCGTTGCTGATGTTAAACATGCCACGAAC CAAAACGCAAGGGATAGAAATTAACACCGCTGGAATAAAGAAATTTTCCACGACATTAAGCTATGAATAAGTAAA AAAATGTTTGTAGATAACGCGGAGTTTTCAATCTCATCCAGCATCTGAATTCCTAAGGTAGTTAAACGC TTATTTAAGCGATATTATGATCGCAGTTTTGCGAATTTAAAGAAATACCAAGCACGAGCGCTGAAAGATTT GAGCGAAAATTTCTATAAACGAGTTCTGTTAGAGATGTTTGAAGAGCGATCAAGCACGAGCGATATTAGCGAGA TTTTAGGAGGAGCGATCGCACGATTTGCACGATTTGATCGGACAAAGCGTTATTTGAAGCCTTAAGAAGCGAT AACATTAAAAAGGCT	1114	QLPKSRVRLNEREYDLDYAIVKAKDLK PSFTTGGTQKRTDMNEEQIKSIAENFD PKKIFSGGFEDLPILHDGQVIAGNHRI QGMLNFTPKSRFSYERAIEKYHYIDLK PDELLVRVPHKRLNNTNINLAASSNQ GRFNSESDHAIIVLSHYEAKLKELDQK LDADSIYSLKNIVAKNLNFDKATHPNVT DSNLALLMFNMPRTKTQGIELLNRWKK EFSNDIKSYEKVKKMFVDNAGSFHNL HDLNFPKVS LNAYLSDIMDRSFANLKN YQSTSESLKDLSEKFYKTSSEMEFEKS DQSTSDISEILGGAIRFARFDDPSKAL FEALRSDNIKKGLK
HP1444	1115	AAAGGCTTAAACCAAGCGGCGCAAGCCAGGCGATTTTCTGATTTTTGAAGATTAGGCTCGTTTTTGAAGAC GCTTTTGGGTTGGCGTAGGGGAGTAAAGGCAAAAGCTCTATCGCACCGGATATTGCAAAACCTTGAATT GAGTTTCAAGAAAGCGGTTTTGGCTGTAAATAAACCAATTAAGTCCATACAGAGCGTTGTGAAGTTGCGATG GCACGGCGCTAAAGACAAAGCCCTAGAGACTTGCAAGCAATGCAATGGCAGGCGAGTGTATGCGTCAAG GTTTTATGATTTTGGCAAACTTGTTGGGCGTGTCAAGGCAAGGCAAGATCGTTAAACCCCATGCCAAGCGTG CAAGGCTAAACCTATATCCTTAAAGATGAAGAAATGATCGATAATCCCTGAGGCGATTGATGATCAAAACCGCAT GGTGCTTAAAAATAAGGCAATGAATACGAGAAAGGAAAGAGGGGATTTGATTTAGAAGCGCAAGTCAAAGAA ATGAGCATTTCAAGCGCGAAGGCTGCGATTTATTCATTAAAGCGCGGTTTTCACCACATATCGCTTAGGCGATA CGATTAAAGTGCCGCTTTAAAGGGGACGAACTGGAATTAATAATCCCTAGAAACGCCAGAGACAAAGCAGACTTTT GCGTTTGAACGAGGCG	1116	KGLNQAGASQGDFOFFEDLGSFFED AFGFGARGSKRKQSSIAPDYLTLELS FKEAVFGCKTKIKVQYQSVCECDGT GAKDALETCKQCNGGQGVFMRQGF MSFAQTCGACQKGKIVKTPCQACKG KTYLKDEEIDAIPGIDDDQNRMLKNK GNEYKGRGDLYLEAQVKEDEHFKR EGCDLFIKAPVFFTTIALGHTIKVPSLKG DELELKIPRNARDKQTFARNEG
HP1074	1117	AAAACTCAAGCGCTTGTTTTGAACGAAAGATTTGGCGTGTGTGACAAACCCCATCAAGTCTATACCCACCTAA AGGCTATTTTACCATGAAAGCTTATTAGATTGTATCCATCGCATTTTGGCAAAACGCCACCCAGCCACAGACT AGACTATGAAACGAGCGGTTGTTTGGCGGCAAGACCTTACAAAGCGTTAAGGATTTAAAGCGCTTTTCATGC AAAAAAGTAAATAAATTTAGCACTAGCGCATGGTTGGTTGAAAAAGCATGAAATAGACAAACCCATTC TAAGCCACAAACATTCAAAGATTTGCACATTCGATCTAAATTTCTCTTAGGCAAGCAATCAATCAAGCTTGT TGAGCCTTTAAGCTATAACCTTTTGGATATAAGCCTACTCAAAATCACCCACTCACCGGCGCACGCCAGAG TCCGCTTGCAATTAAGCAGCGTGATCATAGGATCGTGGTGAGGGCTTTATGGGTGGCAGATGAAACGCTAG GGATATCTTCAATTAAGCGGTGAAATAACGCCCATTAATCTCATGCTCCATGCCGCTAGTTAGAGTTGAATTTAA AGGAGCGATCTATAAATCGCTTCCCGCATGCTGAACGCTTATGCTTTTAAAGATCTATCCTTTTTTTTATTGA TTGATCTTTTGGTTGCTCTTCTGGGTTTGGTTGAGGTCGCTATATGTTCTTTGATGTTTTTCTCCACACAG GAGCGTTTTTAAACTCTTTGAAATTTCTGGCTGATTTAAACAAAGCTATCGTTAAATGCTGTTGTAGCTGTTTTG AGGTTTTCTTTCACCTCGTTGATGTTGTTCAAAATTTCTTTTTTGAATCATCTCTGTGGAGCCATTCATCAATATAAT GAATGCTGATCGCTTCCAAACCAAGCCCAATAGTGCAAGCAGGAAGGCCCGCAAGTCCAAAGAACCGGCTC AAAGCTGTG	1118	KTQALVFETKDFGVFDKPHQVYTHPK GYFYHESLLDCIQSHFGKNAHPAHRLD YETSLVLAGKTLQSVKDLKALFMQKK VKKTYLALAHGLVEKSMKIDKPIPTQN IQKDLHRSKISPLGKQSIITLVEPLSYNP FLDISLLKITPLTGRTHQIRLHLSSVDHR IVGEGLYGVADENAREYLQLKRENNAP LLMLHAASLEFEFKGAIYKIASPMPEF MPFLKDLSEFFY

HP1074	1119	CGGTGATGGAATTAAACGCGCAGAGATAAGGGTAATAGGGAATTTATTTAGTTCAAAATTGATGAAGAGATAAAAGAAG ATGAAAGCGCTTATGATTTTGTAAAGAGAGTAAAGTGCAAGCGCTGTATTAGCGACATTACCATAGAAAGGG TTAAAGAGCGCCCAAAATAAGCCAAATTATCAAAAGATAGCGGTTTGATTTAGGCTTTAAAGTTTATACCTTACA AGACAAAGTGCAAAATTATAACGACAAAGAAATAACGCTTTTAAACCGATCGGATTTAACGCCCTTTGACAAAGC CCTAAATTTAGCCCTACAATCGGCAAAACGCTCAATCAAGCGCTAGAGATTATCATCAAGACAAACTCTACAAATG CGAAGACGCTTACTTTGTATCGTGTGCGATGAAGAGCGCAAGAGTATTTAGCCAAAGCAAAACGAAATGATATT TTTAGACGGCTATGAAGAGATTGATTAGAAGCCCTTTCTCAATCTCAACGCTAGCTTTAAAGAGCGTTTAAAGCGTGGT GTATTGATTTGAAATAAAAGGGGTTAAACCGCTTGGTGGTCTGCTCTAAATTTTATAGTTTGTGTTTGTAGTATAAT CCTACGAAATTTTAAAGAACGGCATGGAGTTTGGGACTGATTTTAAAGTCTGGCCGCTATTTGATAGCGTTTAA AAGCCTGAAAGAAATTTGGCGTTTGGGATTTTGGTGTGTTAGTGGAGCTTATTTATTTATAGCCAC AGCTTAGCGTTTGGCTAACATGAATCTATAAGGGGATGATGATAAGAAACCCGATTTTACAACCTTTTTCT TTGGCAATTTAGGATTTTGTCTTCTGTTGGGTTTGGGAAATTTTATTTGGCTATGTTTGAAGATTGCGCTT GTATTTTGTGCTGGCGCAACGCATCAACATGATTTTAAAGGGCTGTGGCGCTTTTGGTGGCTTTTGGGTTT AAGCCTAA	1120	VMELNAEDKGNREFILVQIDEEIKEDES AYDFCKKELKSAKPVISDIITIERVKRAA QKISQLSKDSGLDLGFKVYTLQDKVQII NDKEEITLFRSDLTPTFDKALNLALQC GKTLNQALEIIIKDKLYKCEJAYFCIVCD EEAQEYLAKSKNEMIFLDGYEEIDLEAF LNLNASFKERLSVVY
HP1074	1121	CGAAGCGGATGCTGAAGCGCTAGAAGCCTTCAAGTTGTTGTCACAAAAGAAAGGCATTATCCAGCGCTAGAAAGC TCACACGCCCTTAGCGTATGCCCTTAAAGCTCGCTCAAAAATCGAAGAAAGAAAGCATCATCGTAGTGAAATTAAGCGG CAGAGGGGATAAGGATTAAAGCACCGTTTAAACGCTTTAAAGGAGGTTTAAATGAGGTATCAAAACATGTTTGAA ACCTTAAAAAACACGAAAAAATGCGTTTATCCGTTTGAACCTTGGCGATCCCTAATTATGAATGAGTTTGA TCATTAAACCCCTAATTATTAGCGGGTGAGCGCTTGAATTTGGTCTTCTGCTGCTGCTGCGGATGGCA TTACCATACAAGCGGACCTTTAAGGGCTTAAACACGCTAGCATGGCTAAAATTTCCAGCTTTTAAAAAGATTA GAGATTACAACCAATATCCCATAGGCTTTTAGCGTATGCGAATTTAATTTTCTTATGCGTGTGATGGCTTTTA CGCTCAAGCTAAAGAAATCGGTATAGATAGCGTTTAAAGCGGACATGCCCTAATAGAAAAAGAAATGATCATCAA ATCCGCTCAAAACACCAATCAAGCAATCTTTATCGCCAGCCCAATCGAGCAGTAAAGATTTAGAACAAAGTCG CTACGCTATCGCAAGGCTATATCTACGCTTTAGCCAGAGTGGGTTACAGGGCGAGCGGATTTTAGAGAAATGAT TCGAGTGTATTTAAACCTTAAAGCTTTAGCCCTACCCAGCTTACTGGCTTTGGCATTTCCTCAAAAAGAA CACATCAAAACGCTAAAGGCATGGTGTGCTGATGGGCTGATTTGGGATCAGCGTTAGTCAAAATCATAGAAAGAAA TTTAAACAAATGAAACGCGCATGCTGGAAAAAATTAAGGGTTTATAGGAGGAATGATTTTAAAGGCTTTTAGGCTTTG TTGCGTTAAAAAT	1122	ASDAEALFAFKLLCKEIGIIPALESSHA LAYALKLAQKCEESIIVN..SGRGDKD LSTVYNALKGGLK
HP1074	1123	CTACACCCCAAGCAGACGCTTCATGTGCGGTGTTGGACTCTAAAGACATTACCGCAAAAGCAGTGTCAAAGGCTTAC TCACTAAGCTTAAAGCAACAGCAGGGAGAAACAATAACGGCGCATCACAGCGCCACAAAGAGAGAGGGGCTAA AAACTCTATCGCAATTATTGATTTCAAGCGCAATAAATACAATATTGAAGGAAAGTGGCTGCGATTGAGTATGATCC TTACAGAAATCGCGCATCGCTCTTGTAGTCTATCCTGATGGGACAAACGCTATATTTACAGCCAAAGCGGTTTGA AAGTGGCGGATAGCGTTATCGCTGCTGAAGCGGTTTGGATATTAAGTGGGCTTTGCGATGAAGTTAAAAATATC CCCATAGGAACGGTGTGCTAATAATTGAATGCATCCAGGGCTGGCGGCAATTAGCCAGAAAGCGCAGGAATGA GCGCTCAAAATCATGGGTAGAGAAAAATAATACACCAATTATTAGGATGCCAAGCTCTGAAATGCGCTACATTCTAAGC GAATGTATGGCGAGTGTGGCGTGGTAGGGAATGAGGATTTTATCAATGTCTATCGTAAAGCGAGGCGGTAACC GCCACAGAGGGATCCGCCCCACAACTCGTGTAGCGCGATGAACCCAGTGCATCCCGCATGGTGGGGGTGAGG GTAAACAGGGACAAGCGGTCTCTGTATCGCTTGGGCACTCCAGCTAAGGGCTATAAAACGAGAAAGAAAA AGCTAGCGACAAGCTCATCTTCCAGAAAGAAACATAAATAAGGTTAAAGAAATGCTAGGTCAATTAA	1124	YTPSRFMSVLDSDKITAKSVKGLLT KLKATAGRNNGRITSRHKIERGAKKLY RIIDFKRNKYNIEGKVAIEYDYPYRNARI ALVYPDGDKRYILOPSGLKVGDVIA AEGGLDIKVGAFAMKLNIPIG:TVVHNE MHPGAGGQLARSAGMSAQIMGRENK YTIIRMPSSSEMYILSECMA:SVGVGN EDFINVSIGKAGRNHRGIRPQTRGSA MNPVDHPHGGEGKGTSGHPVSPW GTPAKGYKTRKKKASDKLIIS:RKKKHK

HP1074	1125	AAATAGGGATTTGTATTTAGACGGCGCATGCGGATATTCACACGGCTTATGACAGCGGATTCAAAGCATATCCACGGC ATGCCCTTAGGCATGGTTTAAATCGTGCTAGTGGTTAATCGCATGAGCGAGAGCGAAAGAAAGCATGGCA AAGCTTTGCTCTTTGGGTTAGAAAGGAGGTTAGAAATGATCTAAATGTTGGTGATTTTGGGTAAGAAG CACCGAACAGAGCGAAAGAGATGTGATTAGGAATGCAATCCCTTATTAGCGTGATGCGATAAGAGAAACA TGCAAGAAAGTGTTCAAAAACCAAGAAATCAATTAAGCGGTGATATTTATCTCAGTTTGATTTGGACATTAT GGATGGCAAGCTTTTCACTTCTACCGGTGCGTGAAATAACGGGTGAGTTTATGAGCTCAAGCAATTACTGG GTTTGTCTTTAGAAAGTTTAAAGACCGATTAAAGCGGTGAGGTAACCGAATACACCCACCGTGAGTATAAAC ACAATACGAAGAGAAAGCAGGTTTATAGATCTTAGATCTCATCATAGCTGTAAGTTAAAGATAAGAAAGC ACTCTTTTGAAGGAGTTACTGATCGCTTTTCAACCAACCAAGATAAAGGTTGAAAAGTTGAAAATGAAACTAGCA ACAAGAGTGCTAAGAAAGAAATGAGAGTAAATGCTTTTATCAAGAAATTTAAGACTAAAATTTGTAATATACACAA CATAAAAGTAATAATCTAGGCAAGCGCTTTTATGATCAATTAAGCTTAGGCCTAGATTAT	1126	IGILYLDADHADIHTAYDSDSKHGHMPL GMVLNRVRSFGFNRMSSESEKAWQKL CSLGLEKGGLEIDPKCLVYFGVRSTEQ SERDVIRELQIPLFSVDIRENMQEVVQ KTKESLKAVDIHYSLDLMDGKLTST GVRENNGLSFDELKQLGLLLEFKDR LKAVEVTEYNPTVSIKHNNNEEEKQVLEI LDLIINCKIKDKKHSFARSY
HP1074	1127	TAGGCATGCAAAAGTTGATTATGAATTAAGCGCGGTTGATTAAAGATGGCTTTTAGCGTTCAAACAAGCCC ATTACGCTGAAGCGTTACGCCCTTTTCTGAAGTGTGTTTGGATAAGACAAACCAAGCCAAAGTAGGGCGT TATTAAGCGACATCGCTAAGGATTTCCCTAAAGAGCCCATAGCTTTATGAATGATCAAGCTTGATCGCTATGC AAAACGGAGTTTAAAAAACCCAGGCTGAAGAGCAATCATCAATTTGATCGCTCTTTGATGAGGGCTAAACCCAA TGGCTGAAAGATTGATGTGCAAAATTTCTCAAAAAGCGAAGATTGAATGGCATTGTTGATCGGATTCAAACGCT TGAGCTTGAGCGCGGTTTAAAGGAAGCGTTTGAAGATTGATGTTCAAGCTAGGGTATTGTTGACAATAAAGAG GATTTTATGAATTTTGAAGAATTGAACCATTTAGCTATTACGAATTAAGCAATTAAGCAATTAAGCAATTAAGCA AGACTCTTTTATTTACGATGAATTTTGGCTCTCTTTAGAAAGCGCTCTCAAAATCCAATAAGGCTTAAAGAAATGAAA CTTAAAAAACCCCTGACTTATCAAAACCCACACCTATCTTTTTGAGCGATAACACGATGAAGTTTGAAGAACCCCTA AAGAAATCCTTTTGTCAAAACCGCTTTTAAATGAAAATACTCTCACTTAATTGCAGAAAAAACCTGGCTATTTTGA TTTCAACGAGCTTAAAACTACTTTGATTTTAAAGATTAAATTTAGGGATTACAGGCACATAATGGCAAAACGACCACA GCGAGCTTGATGTATTCCTTGCTCTTAGATTGAATAAAAGACCGCTCTTTTAGGCACAAAGAGGTTTTTTTATCAAC AATGAACGAATCAAAGAAAAGG	1128	
HP1074	1129	GATTCAGGTTATGACGCTTTTAGTAGGTTAGGCAACCCCTACTTTGCGTTACGCTCACACGAGACACAACGCTGTT TTGATATTTTAGATTCACTCGTTAGCGAATGGATCTTTCTTCACTTTTCTCCAAACACAACGCTTTTATGCGTT TATAAGGATTTTATCTTCTAAAGCCACAACTTACATGAATTAAGCGGAGAGCGTTTAAAGCGCTAAAAATTTT ACAAACCAAGAGCTTTTAAATGTCCATGACGACTTGATTACCTTTGGCGTTGAGGTTTAAATGGTGGGG GGAATGGAGGCGATAATGGCTTAAATCCATTGTTGTTCTAATCTTATTATCGCTTGAAGGTGGGGATT CTAAAGGAATAGCGTAATTGAGCATGTGCTTTCAAAATTCACAAAAACGAAGAGCTTTAAAAACGCTGCGTTTG AACATGCCAAAAACGCTTAAATTTTATAGAAAGCCATGATTTTAAAGCTATGCAAAATCGTTTACGCTTAAAA ACCTTTAAAAATAGAAAGTTAAATGCACCTCTATCAAAAGTTTAAAGTTTATCGTGGTTGAATAAGGGTTAAAGTG CGTTTGTATTAGATTGTGGGTGGTATTATTTCAAAATCTTTTAAATCGTGTCTTTAGCTTTAGAAATGTTTTGTAGG CATTGACAGCCTAAAATACGCGGATAAAATGCCCGATTCTGCGAATCATGATCAATTTATTTTACCTATGATATTTA TTGCTCTCAATTACACCTTGCCCATTTCCCTGCTTTTGGCGATGGTTTATTTATATCGCATTCATTAATCCAACG AATACACCGCCCTGCTCCTCCATTGGCTTTTCCAAATGCCAGATTTTAAAGCCCTATTTTGTAGTAGCTGTTTTTCAC GGCTATTTATGTGGGTTGAACGGGACTCCTTTTGTATATGAAGAA	1130	DFRL

HP0515	1131	AGGGATTAAAAAGGTGTTCAAAGACAGCAAAAAGACGCTTGGGGTTCATCTATGAGATCAGCGAGTTCATGAAA GCCATACCGCATTTGCTAAAAAACAAGACCGATACGCTATTATTGAGGTATCTCCCTCTAGGTATGGCCAGC ATTTAAACGACTGCCCTTATGTCAATACCCGTGATTTGACGCTTGAAGAGCTTTGGTGCTTATTATTACCAAA CTTGATTGACGAGGACGATCAGCGCATCAAGCAACCGATATCAACATTAACACCTTTGATCAATACCTCTATACTTAT AGCGTTGAACCATCAAGAGCTTATATTGAATAGCATCGACTCTTAACACCTTTGATCAATACCTCTATACTTAT GGATAGCTCTTCTGTTTATCATAGCAATGGTGCTGCTTATAGCCCTAGCTAATTTATTCATGGCAGATGAAG AGAAACCCCATTTTATCGCTATGGATGCCGAACCCAAAGTGAGCATATTTGCCACAAACGCCCAAGAGGCGAGT CAATGGAACGCGGATTTTGACAAAGAAAAGAGAAAGATGGTAATAATATCGCGAATTTAACCCCTTTAAAGCGT AAAAGAACGCGCATGCTTTAAACGGGATTTTGATGAAAAAGAAAAATTTATGGAGGCAAGACACGAGCAAGT GATTAGCTGTTATGACATCACTAAAGAAATTGTATAGCAATTATAGGAAGTGAAGTCCCTCCAAGAGCGGATA CAATCTTTGTATAACACTATCAGCCTGTTTACACATAGAGGGCAAGAGATGATTTTGAAGATGATTTTGATCTA GAATGATTAAAGATTGCCAAGCATCAAAACAACAAGA	1132	GLKKVFKDSKKDACGFIYEISIEFMKAYT ALLKKQDRYVYLLRYLPSRYWASILT LYKYPDFDALKKLLVSYYYCTWIAAG TTTRIKQTSINIKNVKSNSKSVETIKELIN SIDSYNFTDQYLYNLWDSSSYHHSKW VRPVLALANYFMADEEKPHFIAMDAET QVEHILPQTPKRGSQWNADFDKEKRE EWWNNIANLTLLKRKKNHAHALNGDFDE KRKIYGGKDTSKVISCYDITKELYSNYR KWNEKSLQERYKSLYNTITPVLHIEGQ EDDFEDDFDLE
HP0515	1133	GCCCCATGTGGAATTCAAACCTGCCATAAACCCCAATGCGATTATGTGTGAGTCGCTAATGCAAAACATCACTTTT TTAAAGGCTCAGATATTTGAGTTATGAACCCAGAGAGGCTCTGCTCAAGTATTTGATATTTTAGATAAAGATGAAAG AAGTTTGAAAACGCCCTTAAGGATTTAGAAAACCCCTTTGGGTTGGCCCTACATCAGAAAAGCTTATGAGCATAA AAGGAATTTCTAACCCACCAGATTGAAGCTTCTTTTGGCCCAACACATTTAAGAGAGCGGAATGCTTGGAA TTTTGAAAACGCTCAGTCATTAGCGTATTTATGCCCATTTATCTTTCTGTAGAAATACGAGTTTATTTTAGCGTA AAGAAATTGATGATCAGTCTCATAGAAAAGCCCTTACATGCCCTCCCTCTTTCAATTCATGCACTTCGCTCC AACTTTTCTTTCCACGCATAAGCAAGAACGACAGCAGCAAGAAATCATGATTTTATCCCTAAGGTATTCC TTTCATGTTTTTCCCTATCGCTGCTTTTCCAAATATCGGATGACTTGTGTTTGGCTTGTGCTCACTCAATCCCACCTCT GGCATAGCCGTGCCAGGCAAAAGCTTTTGGGATGCTTTGATGAAATATTTCAACCATGTTGCGCT	1134	PMWNSNLPKPNAIYVYGVANANITFFK GSDILSYETREVLKLYFDILDKDERSLK NALKDLENPFPGFAPYIRKAYEHKRNFL TTTTRLKASFRPTTF
HP0515	1135	TGACATTAGCGTGGAAAAATCGTTAAAGAAAACCCCTGAGATTATCTTTATTTGGTGGATAAGCCCACTCAGCCCTGA AGATGTGTTAAACAACCCCAATTTGCTACCATCAAGCCATTAAACAAGCAGGTTTATAAAGCTCCCAATGGA TATTGGCGGGCTAGAGCCCACTCATAAGTCTTTTATCGCTTAAAGCCCACTGAGCCCTTAAGGGCGTGG ATATTAATGCGATGGTTAAAGACTACTATAAGTGTTTGTGATGATGAGAGGTTGAGCCCTTTTATGGCA TTAATTTTAAAAAGGGTGTGATGTTTTAGCCTTTTCGTGATCGCTAGXTTAGAACAGCCCTATAGCGATACA ATTGCTAGAAAGCAACTCCCTCCATAGCTCAAAAACGGCAGCCGCTAGACCTTTAACCGGAAGATCCCGCCCAAC CCAAAGGCGTTGATCACCAAGAAAACCTAATAAGCAGCACACGCGCCACGCAAAATAGCGAATATTTTGGCTCTTT CAAGCGGTTAGCGATCCCTAAAATCAAAACATCAAAACAGAAAACAAAATAAACAAACGCATAGCCCCAAAACCC CCATTCTCGCGGATCCAGCTAAGACCATGTCCGTATGCACTTCGCTCAAAAACCCCAAGCTTGATTGCCCAAGCC CAAGCCCTTGCCCAACACCCCTTATGCTATGCGATGCGCTGATGAAAGACCTGATAGGATTCGGGCAAGTC GCTTATTCTAAGAGCGTTGCTAATCTATCCGGCAAGCGGTGAAAAGCGAATTTTGCAAAATAGACCAACCAATTT CAGGCGCAAAATCCTATGCTGCTTGTAAAGATCGCTAAACGCTGATCGCAACGCGCTGAAATATCAAGCCAA ACAAATGCACGCTCCCGCCAGAAAACCAACACCGCTAAACCGCCCAACAAAGCAATCTGCCCAATCG TTTTGCAAAACCCCAAC	1136	DISVEKIVKENPEIIFWVWISPLTPEDVLN NPKFATIKAIKNKQVYKLPMTMDIGGPRA PLISLFIALKAHPEAFKGVNDINAMVKDY YKVVFDLNDAEVEPFLWH

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HP1444	1143	GCTAAAGGGCGGCTAAATGCGCTTAGCGTGGTTTTGACITTTGGTTCTTAACCTTTAAACCCCACTAGAGGGAG TTTTTCTATAACGCTCCTGTTACGACAGCGAATTTTAAAGATTATGGGCTTAGGGCTGGTTTGAAGAGCGAC TTGGAGGGCTCCACAGGCTTCAGATTGAATGGATTTCGCCCATGGGCTTTGGTGTGATTTTCCCTATAGCGT TTTTCAACCAATGGGCGGATGCAATGGCAAGAAATGTAAAGGCTATGCTTCAACCCCTAACATGGACGATTACACG CAACACTTTGAATTTTCTATGGGAACAAGTTTTAAATGCGCATCAACAGAGAAGAAATTTTGGATTTAATGAAAAAC GCGCCCTTGAAGAATTTGGGCAAGGGCTTTGAGGGTGAAGCAACGCTTGACCCCTGAAAACTTGACGACTTTTA TTGTGATAGGAATATCAATTACACCAATATTTGTTTGTGATTGCAAGTTTGGCGCTTCAACCGCACCTTAAAGA AAAAGACGCTATGTGTGAGCTATGAAGAAATGATCAAAAGATTGAAGAAATGCTGCTATTTGGCGGCACGCAGA TCCCTTTTCAAGGGGGGTGACCCGAGCTAAAGATTGATTATGAGAACTCTAGTCAGCCATATCGCTCAAAAT TCCCCACCATCACCATTCATGTTTACGCGGTTGAGATTGATTACATTTCTAAATCTCTAAATGCTTTTAAAGA AGTTTAGAAAGTTGAACACGCGGTTAAGCTCCATTCCAGGAGCGGAGCAGAGGATTAAAGCGATAGGGTG CGGATGTCAATTGCTCTAAATAATGAGTAGCGATCGGTGGATTGAAGTGCATAGATGCGCATCTTTGCGGGAT TAAAGCACGGCTACCATGATGTTGGGAGCGTGGATAATGAAGAAGACGTTGGTGAGCAATTTACAAAGAGTGCGC GATTTGCAAGATGAAC	1144	LKAAMRLAWFFDFGFLTFKTPTRGSF FYNAPVTTANFKDYGVIGAGFERATW RASTGLQIEWISPMGPLVLIFPIAFFNQ WGDGNGKKCKGKGLCFNP'NMDDYTQHF EFSMGTRF
HP1444	1145	AAAGGCTTAAACCAAGCGGCGCAAGCCGATTTTCTGATTTTGAAGATTAGGCTCGTTTTTGAAGAC GCTTTTGGGTTGGCGTAGGGGAGTAAAGGCAAAAGCTCTATCGCACCGGATTATTTGCAAAACCTTGAATT GAGTTTCAAGAAAGCGGTTTTTGGCTGTAAATAAACCATTAAGTCCATACAGAGCGTTTGTGAAGTTGCGATG GCACGGCGCTAAAGACAAAGCCCTAGAGACTTGAAGCAATGCAATGGCAGGGGCGGTTTATGCGTCAAG GTTTTATGAGTTTTGCGCAACTTGTGGGCGTGTCAAGGCAAGGCAAGATCGTTAAACCCCATGCCAAGCGTG CAAGGTAAACCTATATCCTTAAAGATGAAGAAATGATCGATAATCCCTGAGGCAATGATCAAAACCGCAT GGTGCTTAAATAAAGGCAATGAATACGAGAAAGGAAAGAGGGGATTTGTATTTAGAAGCGCAAGTCAAGAAG ATGAGCATTTCAAGCGGCAAGGCTGCGATTTATTCATTAAAGCGCGGTTTTCACCACTATCGCTTTAGGGCATA CGATTAAAGTGCCGCTCTTAAAGGGGACGAACTGGAATTAATAATCCCT	1146	KGLNQAGASQGDFFFE:DLGSFFED AFGFGARGSKRQKSSIAPIQTLLELS FKEAVFGCKTKIKVQYQSVCECDGT GAKDALETCKQCNGQKVKTPCQACKG MSFAQTCGACQCGKVKTPCQACKG KTYLKDEEIDAIIPEGIDDCNRMVLKNK GNEYEKGRGDLYLEAQVKEDEHFKR EGCDLFIKAPVFFTTIALGHTIKVPSLKG DELELKIP
HP1444	1147	ATTTAAAGCGCGGTTGATTAAGATGGCTTTTAGCGTTCAACAAGCCCATACGCTGAAGCGTTACGCCTTTT TTCTGAAGTGTTGTTTGGATAAAGACAAACCAAGTAGGGCGGTTATTAAGCGGACATCGCTAAGGATTT CCCTAAAGAGCCCATAGCTTTTATGAATTTGATCAAGCTTGATCGCTATGCAAAACGGAGTTTAAATAACCGGC TGAAGAGCAATCATCAATTTGATCGCTTCTTTTGTGATGAGGGCTAAACCAATGGCTGAAAGATTGATGTCAAAT TTCTCAAAAGCGGAAGATTGAATGGCATTTTGTATGCGGATTTCAACGCTTGAGCTTGAGCGGGTTTAAAGG AAGCGTTTGAAGATTGATGTTCAAGCTTACGCTAGGGTGAATTTGACAATAAAGAGGATTTTATGAATTTTGAAGAATT GAACCATATGGCTATTACGAATTAGCAATAAATACATTGAAACATGCAATGAAGCTTTTATTTACGATGAATTTT TGCGTTCTTTTGAAGACGCTCTCAATCAATAGGCTTAAAGATGAACCTTAAATAACCCCTGACTTATCAAAA CCACACCTATTCTTTTGAAGGATAACACGCTGAAGTTTGAATAACCCCTAAGAAATCCTTTTGTCAAAACGCT TTAAATGAAAAATACCTCATTAAATGCAGAAAAAACCTGGCTATTTAGATTTCAAGGAGCTTAAATACTTTG ATTTAAGATTAAATTTAGGGATTACAGGCACTAATGGCAAAACGACCAAGGCTTGAATGATTTCTCTGCTCT TAGATTTGAATAAAAGACCGCTCTTTTAGGCACAAGAGGGTTTTTATCAACAATGAACGAATCAAGAAAAAGGGCT TGACCAAGC	1148	FKKRALIKDGLAFKQAHYAEALRFSE VLFLDKDNQKAKVGALLSDIAKDFPKE AHSFYELYQSLIAMQKRSIKNQAEQII NLIASFDEGLNQMAEKIDVQISQKSEEL NGILYADFKRLSLERGFKEAFEDLMFS SRVFDNKEDFYFLKELNHYGYELAI NYIENMHEDSFYDEFRLRSILEDALKSN KA

[illegible]

HP0990	1155	TCAC TTACATGAGGACCGATAGCTTGAATATCGCTAAAGAGGCTTTAGAGAAAGCGAGGAATAAGATTTAAAGACT ATGGCAAGACTATTTACCCCTAAAGCCAAAGTCTATTCAGCAAGATAAAACGCCCAAGAAAGCCCATGAAGCG ATCAGGCCACTTCTATTATTTAGAGCCAAACGCTTTAAAGACTACCTTAAGCCTGAAGAAATTAAGGCTCTATACC TTAATTTACAAACGCTTTTAGCTTCTCAATGCAAGACGCTCTTTTGAAGCCAAAGCGTGGTTGTGGCTTGCGAA AAAGCGAGTTTAAAGCGAGTGGGAGAAAGCTCTTTTATGCTATTATAAAATTTAGGCAATGACGATAAGGA CAAAATGCTCCCAATTTGAAAGAAATGACCCCATTAATTAAGAAATTTAGAAAGTTAGGCAATGACGACCTACGCCC TCCAGCACGCTATTCTGAAGCGAGCTTGAATTAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGA CAAGATTTCCCTTTTACAAACAGAGACTACATCAAGGTAGAAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGA AGTGATAGAAATTTAGAAAGCA1TTTGAAGAAATCGTGATTCCTCAATTCAGCGCTTTTATGAGAAAGAAATTTG ACAATATCGCTCAAAATAAGCCGACTACCGCAAGTCTTAAAGGACTTTTACTACCCCTTTATGATAAATTTGAAG CTGGAAAGAAATATCATCTCTCAAAAGTGATGAAAGCCGCTCAATCATGCTTAAATGCGGTGGGAAATTA GTCAAAAAATAGCGGTTATGGGAGTTTATCGCTTGCAACAATACCCCTAAATGCAAAATATGTCAAAACAAACTGAA AGCGCTAATGATGAAGCCGATCAAGAAATTTGCGGAAATGCGGAGGGAATGTCGCAAAATTCAGCAGAAACG GGCGGTTTTAGCTTG	1156	TYMRTDSLNIKAELEEARNKILKDYGK DYLPPKAKVYSSKNKNAQEAHEAIRPT SIILEPNALKDYLKPEELRLYTIJYKRFL ASQMQDALFESQSVVACEKGEFKAS GRKLLFDGYKILGNDDKDKLLPNLKE NDPIKLEKLESNAHVTEPPARYSEASLI KVLES LGIGRPSYAPTISLLQNRDYIK VEKKQISALESAFKVIEILEKHIIEEIVDS KFSASLEELDNIAQNKADYQVVKDF YYPFMDKIEAGKKNIISQKVHEKTQS CPKCGGELVKKNSRYGEFIACNNYPK CKYVKQTESANDEADQELCEKCGGEM VQKFSRNGAFLACNNYPECKNTKSLK NTPNAKETIEGVKCEPCGGDIALKRSK KGSFYGCNNYPKCNFLSNHKKPINKRC EKCHYLMSEIRYRKKKAHECICKERV FLEEDNG
HP0990	1157	GATTTTAAAGAGCGTTTGCTTTAAGGGGACGGATTCTAAAGAGACGATAGAAAAACGCTTGATCAACGCTTATAA AGAAATGCAGTGCTTGGAGAGCTTTGATTACCTCATCATCAATGAAGATTTAGAAAAATCCAAAGAAATCATCTTAAG CATCGCTAAACCTTTAGTCCATCGCTTAAAGCGTTTAAATTTGAAAAATCTGTAAAGCTTGAAAAACGAAACCCCTA TAAACCTTATCAATTTTAAAGGCTATAATCAACAAACCAACCAATAGATTAAGGAGTAAAGTATGGG CGGATTCACAAGCATATGGCATTGGTCAATTTAGTATTGTTGTTTATTTGGGCTAAAGATCCCGA ATTGGCTAAAGGTTAGGCAAGTGGATTAAAGATTTCAAAAGCCGTGAAGACGATGAAGAGAGGCTAAAAACG AGCCAAAAACCTTAGACGCTCAAGCAACGCAACCAAGTGATGAGTAGCGAGATTAAAGCAACAAAGAAAGT TAAGCATGCACACTCTATTAAGGCAATTTAGAGAGATTTTGAAGAAAGTCAATTTGTAATACCCCTAAAGACA GAGAGCATGGGCTTACGCTACGCCCTTCTCAATCTCGCCAAAGTTTAAAGAAATCGCCCTTAGCCATCGCT GAAGAGTTAGCCCTTAAATCAGCAGCATGAAAAAATCAAGGCTTTTGACAGCGTAGTGGCTGTAAAGGGCTA TATCAATTTACGCTTCTTTAGATTTTGGAGCGTTTACCCCAAAAGCTTTGGAATGAAAGAAATTTTGGCTCT CAAGTTAAAGCGAACGTTCTCAAAATCTTTTGAATTTGTAGCGCTAACCCACAGGCGCTTTACACATAGGG CATGCTAGAGGGCGGTGTTGGCGATAGTTGGCTAAATCGCTCGCTTTTAGGGCAT	1158	ILKERLLRGTDKETIEKRLINAYKEM QCLESFDYLIINEDLEKSKEILSIKTLV HRLKAFNFEKICKAWKNETL
HP0990	1159	TGGTGTGCGAGAGTTTGTAGCGTTGGTGGCTGATATGTTACTCAATTTGACTTCAAAAATAGAGTATTTAA AAACGATTATATAGAAATTAACGAAATTTGATACATCAGCTTAAAGGATATAAGTGGAATAATACCTAAAA AACGAGTTTCTAAACCAATCAACAAACCTTATCCATAGCTTAACCCCAAAACAGAGCCTTTCTCAAAAAAT CAGCGCTAATGAAATGCTTTTAGAATTAAGAAAGGGCGTTTAAAGAAATGAAGCTTATTTATTTCTGATGAAGAA GATAAAATATGTTTGGTGCCAGATAACGATGATCTCTTTTGGCAGAAACGCCAGAAAGCTTTTGAAGCCAGG CTTAGGGCGGAATTAGAAAGGATATTATCACCCAAAGCGCGATTGATTTTGAAGACGTGCGGAGTTTCTTGTGCA ACTATTGGAAATTTACGCCAAAGATGGGAATTTGCCATATCAACACCTTAAACCTTTGTCAACAAATCAAAAA GAACACCTAATTTATCTTTAATTTGACAACATGTTCAACACACCCCTTTTAAATGAGAAATTTTGAATTTTGA CAATAGCGATGAGGAAATTTTAAATGCAACCATTTGATTTGAAAAATTTTCACAATATTCAGCCCGGCCACGA TACACCGCTACCCACGGGTGAGTTTAAACGAAATTTTAAAGAGAGCTTAAACCGGCTTTTAAACCAT GACAACCTCAAAAACCCCATGCTTTTATCGCTTTTACGCTTTTGGCCTTTTGCAGGAGTGGTATTTTGGCGCT TGTTCACTCATTTACACCGCTTGAAGAGAAAAATCCGCTATATCAGCTACCTTAAAAAGAACTCGCTCTTTAA AAACGCGGATGATACCAACAGAGAGAGTGGCGCAATTCACATATGGAGGCGCACGCCGACCTTTTTCGCCCAT TCAAT	1160	VCESLLALVADMVLLNLTSEYKTIY NEN

HP0990	1161	GAAAAAGACCTGGTTTGAACATTTTATGATGAGTTTATGGGATATGGGGTAAATCATGTTTAGGAA AAATTTGCATGCTTACGCTAAGGGCGAATGCAAGCGCGGTTTCGTAACTGCGTCAATACCCTTACAGAAATAA AGAGCATGGAGAGAGCATAGAGGAATTTTATCAAGAAATGTTGCAAGTGAAGTCCGTTATGGGTAGAAATTG AATCAAAAAAGCGTTTGAAGCGCTTGTGTTTATAGCCAGCTTGGGGTGTGCGGCAATAGCGCTGAAAAAACG CCTTTTTAAACGAAAAACCACTTATCTAGGTTTATAGCTAGGCACAGAGCAATGTGCACACGAGCATGTGG CAACAAGCCTATAAGAGACAACCCACCTGCCCTGGTGTGTTATGGCGAGAAATTAGAAGCCCATATCAGGG GGTAAACCTGTCTATACCGGGCAATAGCGGATGAATAGCTTTGATAAACACCATATTTAGGCTTAAGGGT GTGGGGGATGTAGAAATACGCTAAGCGCAATTAGTCAAAAGTGGGGTAATACCCCTTTATCCCAAGCCCAATT ATGACCCAAACGCGATTAAACCTACGATTCTGCTTCAACACTCAAGGCCCTTAGTTTGCAAAAACCCCAAGCC CTCAAAACCTCTTTCAATAACGGGCATTTTCATGGGTTTGGTTGAACGTGAATGTGTGTTAACCTCCCTATAGA CACCTTTTAAACCTCGCTTTAAACACAGAAAAATGCTGTTTTTAAATAGCGGTGTTGGTGGGGCGGGTGG AATACGCAATATTATGGAGTCTTAACCTATCAAAATCAAAACACGAAAGCGGATAAATTTTGCAGCGGGTGGG GGTTTTTGTGAATTTTGGGGTCTTTGTATATAGGCAACGCAACCGCTTCAATGTGGGTAAAAATCCCTTACT ATAGCTTGAAGCGCGC	1162	KKDLVLEHFDKMFYGDGMGVIMFRK NLHAYAKGEMQASAFRNCVNTLTIKIS MRESIEEFFNQEMQLQSEVPLWVELNQ KSV
HP0990	1163	GAGACTTTGATGGGAGTAAACCTCTATCTTAAGCGCTTATGCTAAAGCGTTGAGTTACGAGTTATTAGCGTTCA AAGAAATTTTGGAGAAATTTTGAATAATTTAGACATTAACCTTTAGGCGAGGTTTACCCCTAAAGATAGTGG ATTTTCATGCTCACTCTCAACACATCATGGAGTGTGTTAGAACGAGTGCTGCGATGGAGTTTTTAAAGCGCT TAAAAAGGCGGTAAAGATTGAATCGATCTAAATCTGCCCTAAATGCCCCCTTTCATGAGCTTTTGACTACC CTTTAGAAATCAATTTGACACCATTTATTGTAACCGCCCTATGTCAAGCACAGGATATTGCGCCAAAGCACAAG AAAACTCCATTACAGCTTTTGTGATGAAGGAGTAATCTCTACTTGTGTTTTCATAGAAAAAGCGATCAAGCATTTAA ACCTAAAGCGCAATTGATTTCATCACCCCAAGGATT	1164	DFDGSKNLSALAKSVELRVYLAKEV FGEFFE
HP0990	1165	TAGCGGCTTAGAAGACGCGAGGCGATATGGATTTAAGATTGCTGGGAATTTAGAGGCAATTACGGCCATGCAAA TGGATACCAAAATGAGCGGTATCAAGCTAGAAATTTATACCAAGCCTTACTCCAAGCCAAAGACGACGAAACAT ATTTTAAATCATGATGATGAAGCGAAAGAAAGATTGTGATCAATTTTCCCATTTGCCACACGAGATTTTAAATG TCGCACCGGATAAAATTGTAGAAATTTATCGTCAAGGGGCGGTGATTAAAGAGATAGTAGAAAAAGTTTGAAGTT AAATTTGATTTGAACAAACCGAGCGGTGAAGTGAATCAATGCGGAATAAAGAGCGCGTTTAAAGACTAAGGAATT TATTTAAACTACTTGCATCTTATGATCAAGAAATTGAGCAATACCTATTGATGAGGTATTAGAAGCTCAAGTGAAA CGAATCGTGATTTGGGGCTTTTAAAGCTTGCCTAAGGGGGCGAAGGCTTGTAAAGAAACCAACATGGACA AGTGTCAAGTGTTTAAAGAAAGCGGATAGCATCAGGTGAGGTGATTAGCTTCAATAAGGTAATCGCTTTA GATTTGCTTAAATTTTAAAGCGTTTTTAAAGCGTTTTTAAAGCTAGTTTGTATTAAATAAATCTTGTGTTATT TTTGAAAGTAGAGGAACGATTGAAATGAAATCAAGCCTAATTTTGAACGGAGTGGGAAATGAAATTTTAGCG TTATTTTCTGCTTTAGTGGCGTCTGCTTCGCTCATGATGGCGAATGGGTGGGATGATGATTAATCTTAT TCTATCTTAGGGCGGATGATCGGTCTAGGGATTGCCGCTTTGGTGGGCGATCGGATGGGAATGCGGCTGCA GCGACCATTAAGGACAGCGAGAAACCCAGGAGTGGCGGTAATGCTCACTACCATGTTGTGGCCATGGCGA TGATTGAAGCGCAAGTC	1166	SGLEDAEGDMDFKIAGNLEGITAMQM DTKMSGIKLEILYQALLQAKEARKHILKI MHEAKEKIVNFHSHLPTTEIFNVAPDKIV EIIGQGGRVKEIVEKEFEVKIDLNKPSGE VKIMGNKERVLTKEFILNYLHSLDQEL EQYAIDEVLEAQVKRIVDFGAFSLPKG GEGLLRKQNMDCQVVLKEGDSIRCR VISFNKGKIALDLA
HP0990	1167	CGCACCACTAGCCCTAAACCTCTTAAATAATTAGAAACCTTGCAAAAAACCTAGATCGATCAATAAATCATCA AACAGAAATGAAAAATCGCAAAATTTATGCGCTTGAATGAAATCTAATGGCGATTACACCGCTTATTACAACGCTTT TAACGACAAAATCACCATTCAGATCACCGCTTGAACCTTAAGCGCTTAAATAGCACTTATTGCTTTACAAAAAC CTTAAAGGATTAGAAATGAAACGGATTTATGTTAGCTTGAATTTTATAGCCCTTATTGCTAACGCTCAAAA AACTCAAGAAATTAATAAACTAAAGAAAGCTAAAGCCAAACCGTTTTAATATTTCCACCACTAAGGTATAGAAAA GAATTTTCTCAAGCGCGCTATTACGCGCTTTAGAGCCCAATGAAGCGCTGATTTTCTCAAAACCTGCGTTT GATGGCTATGTGAAAAAGCTTTATGCGAATAAAACCTATACCCCTTAAAGGGCGACAGGTATTGAGCGGTGA TTCCCTGAATTAGTGAAGCGCTCAAGCGCAATTGCTATCATCTG	1168	HMLALKLLKLETLOKNLESINKIKQNE KIAQIYALDLKSNQDYNAYNAFNDKITI QITQLETLSALNSTYLSQNLKGLE

HP0990	1169	TAAGCGAATTAAATAGCAATGGCGTTTGAATGAAACCATGGCGTTAAACGCCGAGTTTTAGCCCTTTAGCCCAACAGCATGCCAAACGCCAAAGCCTTCAATTTAGCGGGTTAAGCGGTGATTTAGCGGTGGGAAAGCTCTATTAAATATCCGCTTAGATCCGATGATCCCTAGCTTTAAATTTAAGCAAGTAGGACAATATTGACAAGCAAAACAATTATAGTAAATAAGAGCATAAATCTAGGAAGATCTCTTTATTAGGAGATCCACGACCTTGTGAAACCATAGAACGTGCAACCTTAGATATTTTATCCGTTCTTTTCAACACTGACATGTTGAAAGGAGCGGAGCTTCTTATATTAATTACTTAGGATTAAGAAATGTCAAAAAAGTAGCTATACCTTGATGGAGACTTTTTTATAAGATGCTACAAATCTCATTAAGCAACCTGAAGATCTTAACCCAAAAAATTAGCACACCATATTCATACCTATTGCCATAAGCATATAAAAAAGATGAGAAGCTATACCGCATATTTTACGATTGCAAGCCATTAAAGAAAAAGGCTATTATCCATACACTCAAAAGCTCTAGATCTATCCAAAGCCCACTATAGAGAAAGGGAAGATTACACGAACACTTAATTCCAAACCTTGCTGGCGTTAAGTTGGGTATCTTGACGAGAAAAATGCCAGATGGGTCAATCGTGACCAAGAAAAAGAAACCTTTTAAACAGGAGAAATAGTATAGGAAATTCAAAAATGATTTTATCTATCACGCAAGCAAAAGCGCTTGATATAAGATAGGACTTGATATAGCCACTTAGCGTTGAAAAAATTAGTGCAAAAAATCGTTTTAATTTCTGGTGATAGCGGATTTGTCCCTGCTTCAAAACTTGCTCGAGTTGAAGGTATCATTTTCACTCTTGATCC	1170	SELNQMFLNETMALNARVLALLAKQ HAKTPKPFNLSGLSGDLSSGGKALIKNI RLDPHGFPSPKFNFKQE
HP0990	1171	ATTGTTGATTGAGGGGGGTAAGGTGAGCTCCAAACTCACCTATTAAAAACATTTTAGATCTCATTGACAAGCTCATCATTTGCCGGGCGATGAGCAACACCTTCTTAAAGCTTAGGCTATGATGTCAAGATTCTTCTGTAGAAGACGCTCTAATCAATGACGCCCTAGAAATATTGCAAGCGCGAAAGAAAAAGTCAAGTCTATTACCCATAGACGCTGTAACCACTGATGATATCTCAACCCCAACACATTAAATTTACCCGTCCAAGACATTGAGCCTAAGCACAAAGATCGCTGATAGGGCTGCGAGCTTGAATTTCTGAAGTCATAGAGATGACCCACCATTTTATGGAATGGCCCCTTAGGGCTGCATGAAAAACAAGAAATTCGCTAGAGGCACAACTTTTAGCCACAAATCGCTGACACTTACGCTTTCTCGCTCATTTGGTGGGCGATACCATTTGATGCGATCAATCGCGGGGGAAGGATAACATGAGCTTTATCTA	1172	LLVGGAKVSSKLTLLKNILDIDKLIAG AMSNFTLKALGYDVQDSSVEDALINDA LELLQSAKEKKVKVYLPIDAVTTDDILN PKHIKISPVQDIEPKHKIADIGPASLKF SEVIESAPTILWNGPLGVHEKQEFARG TTFLAHKIADTYAFSLIGGGDTIDAINRA GEKDNMSFISTGGGASLEILEGKILPC FEVLDKRH
HP1046	1173	CTAAGGATCGCTTATGGTGAACGTGTTTTCAACACAGCAAAAATTTGTCAATAAAAAACGCTTTAATGACTTTAATGTTTTGATATAGAAAGAAATGAAGTTGTGTTGAATTAATCAACCCACGCCCAATGAATTAGCCACTCTAAGCCAAGAAATGCTATCCACTACACACAGACCATTTCCCAACGAGTCTCATCAGTACCAATATTGGGAAGACAGCTCCA	1174	FEYRRAAKEKRWDMKSKVFPKLAKAIT LAAKGGGSEPDNTNAKLR'AILNAKAQN MPKDNIDAAIKRASSKEGNLSEITYEGK ANFGVLIIMECMTDNPTR'IANLKSYPN KTQASIVPNGSLEFMFNRSKSVFECLK NEVENLKSLEDLEFALIDYGLEEEV EDKI
HP1046	1175	CTAATAACATTTCTTTCACGATCTATTATGGGACTTTAGAAATCTTTGATCTATCCAAAAAAGGTTTTGGCTAGCCCC	1176	EPKDKKEKCESIVGRVKLLRLMGKACFI KVEDESTILQVYVSQNELNDEFKSLKK HLEVGDIVLVKGFPFATKT'GELSIHALE FHILSKTIVPLPEKFHGLSDIELRYRQRY LDLIVNPSVKDVFKKRSLI/SSVRKFFE MEG

HP1046	1177	CACAGGGAGCGGTGCGGAGTGAGGATTAGAGGCTAATCCGGTGATGGTAGCGATTGGAGCGAGTAAGGAATT GGCTCATACCGCTATCAGGCTTTCATTGAGCCGTTTTAACACGGAAGCTGAAATTGACAAAACGATTGAAGTTTTCTC TCAAGCGCTGTAAGGTTGAGAAATATTTCAAGCTCTATTAAAGAAATATAAGGAATCAAAATGGCAAAACATGA TTTAGTGGTTCGGTTCTCTGGACGCATATTTAAAGAGTTCAAGGCGCATGGACAAACCCACGCAATTTAGGGG TCATACCGAAGAGCAGGCTAAAGCCAAAACGCTAAGCTCATTGTGCGGATTATGGCGCAGAGGCATCGGGTGA TGCGGTGAGGTTGATTGGCTTGATGATGAAAGCACGCGATAGAAATTGTTGACGCGAAGTTTAAAGCTTTGGTTGCG GAACAGCGATCGCAAGCTCAGACATGATGTTAGAGTTGTCTTGAATAAAGAGTCCAAAGATGCGGTAAAATCACG AATTTAGATGTGGAAGAGGCTTGAGAGACGATCCGGACACGCCGCGGTGCTGGCAAAATGCACTGCTCG GTGATGGCGTATGATGATCAAAAAGCTGCCGCGCATGTATTTGGGAAAACGCTGAAGATTTGAAGAAGAAAT CATCGTGTGCGAGTGGCTAGGTTAGTACGATTAAAGAGTGAAGCTCAATGATTTAAAAGCGTTG AAGAAATCACTAACTACACCAAGCCGGTGCTTTTGTAAAGCTGTGAGGCGCTGGAGGCGATGAAAAAGGGAT TATTACTTGGTGATATTTAAAGAGTGCGCGAAGAAATGGAAGCTGAAAAACITTAAGCGCACCGCTAATAATCC CAAAGCGGAGAAATGGCTTTCAGGGAAATGACTATGTTCAAAAGATTAAAGCGGTGGATAAAGTCATTGATGAAAA TATCGCCCGATGCTTATGATGAT	1178	TGSACASEDLEANPVMVAIGASKELAH TAIRLSLRFNTEAIEDKTIEVFSQAAYR LRNISSY
HP1046	1179	CCCCCAGATCCAGCGAGTGAAAATCAAAGCACTTTAGGGGGAATGTCGCTGAAATGCCGGTGGCATGCGTGC GGCTAAATACGGCATTACGAAAGACTATGTCATGGCTTAAAGAGTGTTTTAGCGAATGGTGAATCATAGGGCAG GCAAAAAACGATCAAGATGTCGCGTTTTAATGTTGCAGGCTGATGCTAGTGAAGGCTGTTTGGCGGT GATTTCTGAATCACITTAAGCTTTAGCCAAACCGCCCTAAACAAAGCGGATGGGTTTTTAACCATATTGA AGCGCCATGAACGCGCTTTAAGACAAATGAGCAGCGCGTTACGCTGTGCGGATGGAATTTTTGGATAATTGA GCATCAAGGCGGTGAAGAAGGATTTCTAAGGCTTACCCAAAGACGCTGGAGCGTACTC	1180	PPDPASENQSTLGGNVAENAGGMRA AKYGITKDYVMALRVVLANGEIIRAGKK TIKDVAGFNVAGLMIASEGCLGVISEITL IKLLAKPPLKQSAMGVFNHIEDAMNAVY KTMSSGVTPVAMEFLDNL SIKAVEERF SKGLPKPDAGAIL
HP1046	1181	TATGTCATCAAAAAAATTGTTCCACACAAGGCTTTTTCTGCAAAAGATTTAAGTTAGAAATAGCGTTTTGG GTCGTTGATGCGAACCATAAAATCATTTCAATAGAAACCAATAAGGAGCGTTACTTGGTCTTACTAAGCGATAAT ACGGCTGCTTTAGACAAAATAAGCCCAAAACATCTAAAGAAAGCTGATTAAAGAGCTGAAAATAATATAAAGA ATTCAAAATTAGGAAATTTATGCGCGGAAATTTCTAACTACAACTGTAAGTTAGGAAATTTTGACCCGTGG ATCATTTCAACAGGAAATTTCTCTCTCATCTGCTGTTGTTACACTGTTGATTTATTTTATTGAAACACA GAGAAGATTTTTCTTCAAAACCCAAAGCTTGTTAAATTAATCCTGAAAATTTATTGGTTTAAAAAGAGGCCATTC GCAAGATCCAGTAAACACCCAGGGCTCTTAAACCCAGCTGGCTGGCCCAAAACCTCCAAAGCCCTCCC ACACCCCAACTCCGCCAACCCCGCCCAACCTATAGAAAGCTTAAGCTGAGCCTAAGCCTAAACCAAAAC CCAAACCTGAACCCAAAAGCCCAATCATAAACACAGGCTCTTAAAAAGTGGAAAAGTGGAAGAGAAAAGTA GTAGAGGAGAAAAGAGAGAAAATCTGTAGAGCAGAAAGTAGAACAAAAGTAGAGCAAAAAAATAGAAAGA GAAAAACCTGTCAAAAAGAAATTTGACCCCTAACCGCTTCTTCTTGCTTAAAGAAAGTTGCGCCACCCAGACAAGA AAATAAAGGCTTGATAACCAACCAAGGATATTGAT	1182	YVIKKIPIPTQGSFSAKDFKLEISVLGR VDANHKIISIETNKERYLVLLSDKYGLLL DKISPKTSKEELIKEAENNIKNKSLGNL YAGKF
HP1046	1183	TCCAGCGTTTCTAATAACATCATTCAAAGGCGAGAATAAGACGGCAAAATTTTAAATGTAGGGCTGTAGGAATCG CTTGTGTGGAGTTTTGATAAAGATTTAGAGGATGGGAAAAATACCGCTACCAAGTCAATTGCTGAAAAATTTTCAT GGGGGATAAATCCAGGCTAGCGTGATAGTGGAGGGGAAAAACCAAGACTTACCCAAAGAAATCACTAATGTTAGA GTGAGCCA	1184	PSVSKYIQRQNKDGKFLNVGAVRNRL FVEFFDKLEDGKKYRYQVIAENFMGD KSRPSVIVEGKTDLPEITNVRVS
HP1046	1185	AAAAATTTTAGCGAGTCTATTACGCTCGTGTCAAAAACCCCAACGCTTTGGTGGCTAATGTTTAGACGGGAAAT CGTGTTCGCTAAAGAAATCAACATGCTTAAAAAGTCGTTATCATTTAGCATAAATGGGATCCGCACGATTTTATTC TCAATTGGATAAAATCGCTCCACCATTAAGAGCGGCTGCGGATCCAAAAGGCTATGTTTAGGGCGCATTTGATC AACGCTTGGCTTTGAAGTTACCATGAGAGAGAAAACACATCAACCCCTTAGAAC	1186	KIFSESITLVSKTPNALVRNVLDGKIVFA KEINMLKKVIEHKNGIRTIYSQLDKIAP TIKSGMRIQKGYVLGRIDQRLGFVEVTM REKHINPLE

HP1046	1187	GAAGCGTTTAAAGGTGAGGGGGTGGATATAGAAATTAGCGAAGATAGCAGCGAAATTGTTGTCCAGTTCAA TCTTTATCGCGTGAAGTAGCGGAGCGAGACGCTTAAATTTTAAATAGACGCGCGGTATCCAGCCTAACAGGATTG AAGAGTTTATCATAGAGTCGCGCAACCTGGAAAGAAATGCTTCTGAAGGGGAGAGCGTGGTTAGAAATTA GAGCTTGGAGCTATGAAGATGAGCTTAAATTTTAAATAGGCAAAATGCGTTATCGCTCCAGTTTGGGCAAAACGC CTTACAGCATTCTAAGAAAGTCGCTCTTTTAGCGGCTTGAATTCAGAGCAGCTTGGGGGATGATAAACTCGCTA GAAGCGCGTATTTGCATGATATTGGTAAGCGCTCACCAAGAGCTTGGGAGAGATCATGTGAATTTAGGGGT GAGGTGTCAAGCGCCATAAAGAGATCCGTTGTGATCAATCGGATTTATGCCACCATGGGCATGAAGAGATTT GAGCGTGGAGTGGCGAGCGTGTGCGGCTGATCGCTTTCAGCAGGCGCTCTGGGCTAGGAGAAAGAGCG ATGAAGAAATACGCTAAACGCATGCAAGCTTTAGAGAGATCGCGTAGAATTTGATGGGTGAAAGCGTATGCG ATGGAGAGTGGCGAGAAATTAAGAGTATTGTCAAATCCAAAGTCAGGCAATCAAGTGCCTATTATTGCCAG AAGATCGCTAAAGATAGAGAGAGCGCTCAGTATGTGGCGAAGTGGCGTCAAGTGTGCGAGAAAGCGG TTTCAAACGACCGCTACGCTCAAGCAATAATCAAGCCTTTTCCGCACTTTCCAAATGCCCTTAGAAAAACTTT ATAATAGATGAATGAGCGCAAAAAAGTTTCTGATGCGATCACTACAAAAATAATCCACCTTAAATGATGAATTA AGCAAGTAAATGGCGATGATCCT	1188	EAFKKVSGVDIEFSDSELCLSSFNLY RREVASETLKILIEDGRIQPNRIEEVYH RVARNLEKELLSEGESVLELELGAME DELKILGKMYRSSFGQNALQHSKEV ALLAGLIAEQLGGDKKLARRAGILHDIG KALTQELGRDHVNLGVEVCKRHKEDP VVNAYAHHGHEEILSVECAVCAADA LSAGRPGARRKSDEEYAKRMQALEEI ALEFDGVEKAYAMESGRELZVIVKSNQ VRDNQVPIARKIAKKIEESAQYVGEVG VQVRESRFKTTATLKQ
HP1046	1189	AGTGAGCATCAATAATGAGACTTTTAGCCTTAAATCCCTATTGGCGTGAAGAGGGCGAAAGATTAGGGTTCGCA ACAAGGGGAAACGGGGCGAAGCTAGGGCGATTGCTCTTAGAGATCCATATTGAAGAAGATGAATGTATAG GCGGAGAAAGATGATATTACCCAAATCTTTGATTACCTTAAACCGGCTCTTTTGGAGGGGAAATGAATCGC TACTTGGCATAAAACCTTAACCCCTAACCAATCCCTAACCAAGCGATGCAAAATTCGCGCATTAAGAAAAAGG GATCAAAAAACAGAAAAACTTCGCATGTGGGGATTGTATTGCGAGCTCGTTGATTTGCCATAAACTGAAACGCT TTCTAATGAGTTGAAAGCGTTATTAGAAAAAGAAATGTAAGGAGGAATCGTGCGATTATGATGAACCGCTTTATTT AATCA	1190	VSINNETFSLKIPIGVEEGEKIRVRNKG KTGRTRRGDLLLLHIEEEDENMYRREKD DITQIFDLPLKTALFGGKIEIA'WHKTLT LTIPPNTKAMQKFRIKEKGKINRKTSHV GDLYLOARLULPKTETLSNELKALLEKE L
HP1046	1191	CCTGCATTAGTGGATGCCCTCAAAGGAGAGGGGTTGTACTAGGGTTTATACGACTACCCCTAAAGCGCTAACTC GGCTTTAAGAAAGTTGCCAAAGTTGTTGACCAAGTAAATTTGAAGTATCAGTATATCCCTGTGTAAGGGCATAA CTTGCAAGAACACTCTATTGTGTTAGTGGGTAGGGTTAAGGATTTACCGGTGTGAATACCAATCGCTTC GTGGCGCTTTAGACACTGCAGGGGTCAATAAAGAACGGTTTACGCTCTAAGTATGGGACTAAAAAGCTAAAGCG ACCGACAAGAAAGCAACCGACACAAGAAAAATAAGAGGAAAAACAACATGAGAAAGAAAGCAACCCGTTAG GGAGTTTTGGCGATCCTGTTTATGGGAACAAAGTGGTTACTAAGTTTATCAATAAGATGATGTTTCGACGGCAAGA AAAGCGTAGCGGAAAAAATCATCTACAAAGCTTTTAAAGATTGAAGAAAAAGCGGTGAAAGGGGATTGAAGTGT TTGAAAAAGCCCTAGAAAGAGTGGTCTTTAGTGAAGTGGCAGCAGAAAGAGTGGGTGGGCTACCTATCAAGT GCCGGTAGAAGTGAGAGCGCGCCAGCTGCTATCTATTCTGTT	1192	PALVECPQRRGVCTRVYTTTPKKPNS ALRKVAKVRLTSKFEVISYIPGEGHNLQ EHSIVLVGRGVKDLPGVKYHIVRGAL DTAGVNRKTVSRSKYGTKKAKATDKK ATDNKKK
HP1046	1193	TTAATGCCAAAAAGAAATACAGAAAGCAAAATGAAAGGGCGCAATCGTGGAAAGCCCATCGGGTAACCTCCAT TGCCTTTGGGATATTGCGATTAAAGCCATAGAGCATGGAGGATTGATTCACGCCAAATTTGAATCCGCAAGGGTG GCCATGACAAGGCACATTAAAGAGCGGGTAAGGTGGATTAGAGTATCCCTGATAAGCCTTTGACCGCTAAACC CTTAGAAACCAGGATGGTAAAGGTAAAGGCTCTGTGGAAAAATGGGTGATGAATATCAAGCCGGGAGAAATCGTTT ATGAAATGCTAGGCATTGAAGAGGATTAGCGAGAGAGCTTTAGCGTTAGCTCAGAGCAAACTTCTTTTAAAC AAAAATTGTAACCTGTGAGAGCGGAAATGAAATATACCTGAATTGAAAGATAAAGTATCAAGGAATTAGAAGATTGTT GCATGCTAAAAAGCGGAGCTTTTGAAGTTGCGGCTTAAAGTAAAGGCTATGCAATTTAGTAATCCTAACGAGATTAA GAAAGCTAGAAGAAATATCGCTCGCATTAACACGGCCATCAATCGCATTTATCTAGCGTTGAGTAAAAAGGGT AAGCAATGAATACAAAGAGCGCGCATAAAGGCTGTGCAAGGCAAGGTTATCAGCAAGTTTGTGAAAAAGCGCT GTGATCTTGTGAAAAAGAAAGTGGTGCATGAAAAATACCGCAAGATTGTTAAAAATTCAAAAATACACCATCCAT GATGAAAAACATCAGGTGAAGTAGGGGATTTGTGAGCGCGATTGATGCGAGACCGCTTTCTAAACCAAGT	1194	LMPKRTKYRKQMKGRNRGKAHRGNSI AFGDIAKAEHGRIDSRQIESARVAMT RHIKRAKVVWIRVFPDKPLTA'KPLETR MGKGKGSVEKWVMNIKPGRIVYEMLG IEEGLAREALALAQSCLPFTKIVTCE ENEIY
HP1046	1195	ACGGACAAAGACTTGGGAGGCAATTCGACCAACTCGCCATTAAATACAAAGGATTCAAGTGGGTAATGTCATTAA GGTGGGTTTTGCAAGGATAAAGTGGGGTGGTCCGTTTGGATTGATGATTAATCCAGCGTTAAGATCCGCAAG ACTCCAAAG	1196	TDKDLGGIATNSPINYKGIQVGNVIVG FAKDKVGVVRLDLMIKSSVKIRKDSK

HP1046	1197	AAGGGTTTCCTGTGTTTAAATGATAGATTAAAGGATAGTTGGTTAAAAATCAGCGTGCCTGAAAGTATTTGAAC GAGTTTAAAGTGGTAAGGAATTTGAAGGCTATATCCCGGCTTGAAGGAAAGCAGGAAATTCAGGGTCAAATATTT GAGCGTGATGGGGAT	1198	KGFPVLMIDLKDSWLKISVPEKYLNEF KVGKEFEGYIPALKKSTKFRVKYLSVM GD		
HP1045	1199	TGTTGAGCGCTCGAATCATTAAAGTGCTAGAAACGGGAATTTATTCATCTATGGGAATAAGGAAGTGCTAGTGGAT GGGAAAGCAATCCTTAAGGTAGTGGGTGATCCGCCCTTATGATATTGAAAGGAATAACACCATCCAATCCAA GTTTTAGCCGACGCTAAGATTGAATACACGAATTTAGGCATTTAGCGGATTCCAATAAGAGAAATTCGCTGCTGA TGCATGGAACCCAAATGCCCTTATTAAAGAGCAAGCCTAGCATGAGCGGATCGCTATTGTT	1200	LSARIKVLNGNYFIYGNKEVLVDGEK QILKVSQVIRPYDIERNNTIQSKFLADAK IEYTNLGHLSDSNKKKFAADAMETQMP Y		
HP1045	1201	CGCAAGCTTTAAAGTCAAAACAGCATTCAAAATCTCATCATAGATGAGCAAAAACCTCGTGAAGTAACCT TAAATCCTTGAAACCGCAACAGATAAGCTCATTTGAGCATGCAAAAGATTATGCGATCTACAACCAACGCCTAA CCCTTTAGAAAGAGCGCCAGAAATTTAAACGCTCTTTAAACGCTTGAATATCATCAACAAACAGAGAAATG AAGAAAAGTCAGTTGAAAATCTTCTCAAGCCTTAGAAGTCAACAAAGTGGCTAGCTCTTATCAAAATATCAACA CCAGGAGCTATAACGGACCAAAACGATCGCTCCCTTGAACGATTATGAAGTGTGCAAAAATTTGGCCCCATATT GACCGGTTTATAATTTAAATTTTAGCGAGTCTATTACGCTCGTGTCAAAACCCCAACGCTTTGGTGGCTAAT GTTTAGACGGGAAATCGTGTTCGCTAAAGAAATCAACATGCTTAAAGAGTCTTATCATGAGCATAAAATGGG ATCCGCACGATTTATCTCAATTGGATAAAATCGCTCCACCATTAAGCGGCGATCGGATCCAAAAGGCTATGTT T	1202	QALKVKNISQIKISSIIDEQKTREVTLSL KTEQDKLILSMQKDYAIYNQRLTLEKE RQNLNALLKRLNIHQNRENEEKVSLKK SSQALEVKQVASSYQININTTSYNGPKT IAPLNDYEVVQKFGPYIDPVYNLKIFSE SITLVSKTPNALVRNLDGKIVFAKEIN MLKKVVIIEHKNIGRTIYSQLDKIAPTIS GMRIQKGYV		
HP1045	1203	CGGATGACACTCTATCGTAGCGGTTAGCTTTAAGAGCTTTAGAAAGCAAGGCTGGTAATGTGGTGAATG GGGTGAAAAGTGCTTAAACTTATGGCTGAAGTGATGCTTATCCCTACTCCAGAAAGAGACACTGAAAAAATCTT CTTGATGCCGTTGAAGATGTTCTCTATTGCGGTAGAGGACTGTGTTACAGGTAGGATTGAAAGAGCGGTG GTGAAAGTAGCGGATGAAGTGGAATCGTTGGTATCAGACCTACACAAAACGACTGTAAACCGGTGTAGAAATGTT TAGGAAAGAGTTGGAAGAGGTGAAGCGCGGATATGTGGCGTCTTTGAGAGGAACATAAAAAGAAAGAGTG GAACGCGGTATGTTCTATGCAACACAGGTTCTATCACTCCGACAAAGAAATTTGAGGGAGAAATTTATGCTCTTCT AAAGAAAGCGGGGAGACACACTCCATCTTCCCAATTTACCGCCGCAATTTCTATGTGCGCACAACTGATGTGAC TGGCTCTATCACCTTCTGAAAGCGGTAGAAATGTTATGCTGGCGATAATGTGAAATCACTGTAGAGTTGATTA GCCCTGTTGCGTTAGAGTTGGGAACATAATTTGCGATTCTGTAAGCGGCTAGGACCGTTGGTGTGTTGTGAG CA	1204	DDTPIVAGSALRALEEAKAGNVGEWG EKVLKMAEVDAYIPTPERDTEKFLM PVEDVFSIAGRGTVVTGRIERGWWKVG DEVEIVGIRPTQKTTVTGVEMFRKELE KGEAGDNVGVLLRGTKKEEVERGMVL CKPGSITPHKKFEGEIYVLSKEEGGRH TPFFTNYRPPQFYVRTTDTGTSITLPEG VEMVMPGDNVKITVELISPVALELGTKF AIREGGRTVGAGVVS		
HP0870	1205	AACCGGACAAACCGACGCGGTAAACGATCACCCTACCTATAATAACAAAGCCACCGTCAAATTTGACA TCACCAATAACGCTGAACAGCTGTTAAATCAAGCGGCAACATCATGCAAGTCTTAATACGCAATGCCCTTAGTGC GTTCCACGAATAACGAAACACTCCAGGGGTGGTCAACCATGGGTTAAGCACATCCGGGAATCGGTGCAGCAT CTTCCAAACAGAAJTTAGCCAGGTACTAGCATGATCAAAACGCCCAAGAAATAATCGC	1206	TATTTQDGVTTTNTNNKATVKFDITW NAEQLLNQANIMQVLNTQCPLVRSTN NENTPGGGQPWGLSTSGNACSIFQQE FSQVTSMIKNAQEI		
HP0870	1207	TAAAACAAAGCGAAAATTTAAACGAAAGCACACCAAAACCTACCAACTTAAGCCGCTAGAACAAAGCCACGCTGAA AAGTTAGCGAAGTTAGAAAGCGAAGCTAGAAAGCGAAAAGAGTTTGAAGCTAAAGAGCAAGAAAGCCACACG CAAAGCGCATTAAGAAAGAAATTAGAACACAGCAGGAGGCAATGCGGCAACATTGAAAGCCAGACTAAATAGAAG TAGGAGAGGATATACCAACAAACACAAAGCGCAATTACCAAAAGCCGAGTGAGGCTAAACCAAGAGAGATTTA CGATCTAGACTATCGGATCGTCAAGCGAAAGATTAAACCAAGCTTACCACAGCGGAGCAAAAGAGAAACG GACATGAACGAAAGAGCAGATTAAAGCATGCTGAAAATTTGATCCTAAAAGATATTGGTAGCGGAGGTTTGAA GATTTACCGATCATCTACATGACGGGCAAGTGTGCGAGGAACCAAGAAATCCAGGCAATGCTAAACTTACCGCC TAAAGCGGTTTTCTTACGAGAGCGGATCAAGGAATCTATACATAGACTTAAACCGGACGAGTTGTTAGTGAG AGTGCCACACAAAGCGCTAAACACACCGAGATCAACAAATTTAGCGGCTTATCCCAATCAAGGACGCTTCAATAGCG AAAGCGATCACGCTATAGCGGTTTAAAGCCACTATGAAGCCAAAGTTAAAGAAATTAGACCAAAATTAGACGCTGATA GCATCTACTATTAAACAACTTTGCTAAATTTGATAAGGCTACGCTATCTAATGTAAACCGATAGTAA TTTAGCGTTGCTGATGTTTAAACATGCCACGAACCAAGGAGATAGAAATTAACCGCTGGAAGAAAGAAAT TTCCAACGACATTAAAGCTATGAAAAGTAAAAAAATGTTGTAGATAACCGGCGAGTTTTCACAAATCTCATCCA CGATCTGAACCTCCCTAA	1208	KTSNENLSTPKPTNLSPLEQANAEKL AKLESEKLESEKEFLKAKEQEATRKAA LKKLEHERGNAGNIESQTKIEVGEDIP TQTQAQLPKSRVRLNEREYDLYAIVK AKDLKPSFTTGGTQKRTDMNEEQIKSI AENFDPKKIFGSGGFEDLPILHDGQVI AGNHRIQMLNFTPKSRFSYERAKEY YHIDLKPDLELLVRVPHKRLNNTENNLA ASSNQGRFNSESDHAIAVLSHYEAKLK ELDQKLDADSIYSLKNIVAKNLNFDKAT HPNVTDSNLALLMFNMPRTKTQGIELL NRWKKEFSNDIKSYEKVKMFVDNAG SFHNLHDLNFPKVSLSNAYLSDIMDRSF ANLKNY		

[illegible]

HP0199	1219	TTGGCCTAGCTGACGACTGGCGTTATCAAAAATCGCATGGATTATTGATTATTTTCTCAACAAACGCAAG GTTGGTGCAAAAGCGCATGCCATATCCATAGAAAATATGGATTGATAGCTGTTTAAAGATGAAGACGCTAAAG GTTTAGCCATATTGTGAATGTTTTGCAAGAACATACGGCTCAAGATTAGGCAATACCCCTAACGCTTACC TCAAAACCGCTATAAAGCATGCAAGAACAGGTTTGGAGCCGAATTGATTCTTAAACCACTATAAACAATCA AAATATTCTCTTGTGGCATTAAAGACATCGCTCTTTTGGCGATGGTATGACTTCTATATTCAACCAACAAGC AGCGTTTTTAGTGAAGTTAAGGGATTAGAGAAAGCAAGGACATTGAGATTGACCAAAAGAAATACGAACAA GCGCAACCTTAGCCATGATTATGCTTGTAGTGTATTGAATTTGAGTGAACCAACCCCATCTTTTATCTATCGCTA ACCCCTTAAGCATTTAGAAATTAAGGCATCGAGAGAAAGCAAAAGCAATTTAGAAATACCACTTAATAGGGCAAA TAAATAACTATATTAAAGTGGGTTCAATTAATCTAATAGCAGTGGTGAATTTAGATATAATGAAGAGTT TTAAATAAATAACCAAAATCCCTATTTTGAAGTTAAAGAGTTTAAATTTATTTTAAACCCCTTAA GGTTTTTATGGG	1220	GLADTTGVKNRMDLFDYFFPNKRKG WWQKGDAYIHRKLDWLSLKFDEDAKG FHVWFLQEQYGVKDLGITPNAYLK TRYKSMQETGLEAELYFLNHYKNIKIFS CGHLKDMRLFGDGYDFYIQTNKAFL VEVGIREKQGTLRLTQKEYEQAQTS HDYVLVWVNLSEKPHLLSIANPLKHE FKACERKQKSILEYHLIGQIK
HP0199	1221	CAAACTTAACGCCCAACCCCTTATTGAATGTTTGTAGGATTAACTGGCCAAAGCCAAATATTATTCTAAAA AGAAGAAAGAGAAAGAAAGATGATCTTGAAATTTTGTAAAGATATTGAAATATTCTTTTGAAGCTATCCAAAA CAACCAAGCCTGATTTTAAATAAAGACGAGCTTTAGGGATTATCCTAATCTTAAATTTAGATTCTTTAAG	1222	NLNAPKPLFECFVGNLAKAKYYSKKE EREKEKMILNFKIFEILFEAIQKQPKP DFKNKDELLGDYPNLKNLDSL
HP0199	1223	AAGGAACGGTCACTTAAAGCGTGGATGGGTACTTTTAAATACCCCATCTCTGAGGAAATTTGCTCACTTTTTAG CCAGCATCAATTATGTGGCAACACCTCGTGGAGTGGGATTAGGTTTGAAGCAAGACATTAACCACTCGTGAA ATCACGCACACGAACTCATGTTATTTTACCATGGTGGCTGTAGAAATGGCAACCCCAACCCCATGCTAAATACGA GCCTAAACAGAGGTTGAATCCGCGTTATGAAGGGCTTTAAAGCGCAAGGAATGCGCACACGAGGATTTTA AAAGCGGGAACACGAGGGTGTAAAGAAAGCAAAAGCGTAAGCGGTTCACCCCTAAATTTATCCCTAAAAA GGGGTAGTTGGTTAAGCGTTATAAGGGGTGAGGGGTTCAAACAGCTCGCTATGACTGCTAACCTTACTA AAAGAGGGTGTCTTCTGTTTTTAAATTTGATAGCAAGCAATAATCCGGTTTAAAGTGGCATTCCTAAATCTTT TAAACCGCCTTGTAGTGGTGGTCTTGTATTTGGGAGCTAGGGTGTCTGTGGCTAAATTTCCCAACCACTTTATA CAAAAGCTTTAAATCAAAACCCGTTTTTAAAGAAATTTAAGATCTTATCAAAATTTTACTGGTTCAATCGTCAGCA TTTTTAATCTTATTATAAGTTTACAACTGCTTTAAATCTCTATGCTTTTAAACAAAGCGGTTCTTAGTGTC CTTAGCCCTTGCTAAGATTCTCGCTCTCTCTATGGTATCCATTTTCGGTTAAGTTAGCGCTTTAAATGGAGT GCTTTTAAATCTTTGTTTTGAGCTTGATTTCTCAATTTTCTAAAGCTCTTTTTCGCTTGTGATAGAAATTT AAAAACTAAAAAGCTGCTTTGGCTGATTTTGTAGTCTTTGTTGGTGGTGGCATGTTTATTCCTTTTAAAA TATAATA	1224	GTVLSVDGVTFKYPIPVGNLLTFLASI NYVGNTSCEVGKIVLSEDIKREITHTN SCYFTMVAVENGKPTMPKYEPKTEV EIRRYEGALKRKMRTRGYLYKSGKHE GV
HP0199	1225	CACGCACTCCAAAGTCAGGCGTTTAGAATGGGCAATTAATGAATGGCCACTCTGTAGCGCATATCTGGTATGTTA ATTCTTGCTTAGCGGTATCGGCACGCTTTTAGCGTTAAGATGAAGACTTAGAGCGGTGTTGTATTATGAAGCT TATATCGTTAAAGAACCGGCAAGCGCTTATGACAAATGAAGCACTAAGCTTGTGATGAATACGATATTTGAAT GAAGAGCAGTATCAAAATATCTACGAAGATACGAAGACAGGGCTTTGAGCGCAATGGCGGTGAAGCGGATCA AGGATTGTTAGAAAGAAATGATTGATCACCTTATTGCAGAGTTGAAAGAAAGTGAAGACACCAATTTCTGATG CGAAAGAAAGAAACTATTAGCGTTTGAAGTGGTAGAAAGCTTTTAAATCTGTTAATAGGCTGAATGGATGA TGCTCACGTTTACCGGTTTACCGGATTGACCGGATTAGGCGCTTAGTCCGCTAGATGGCGGAAGTTGCGAGTCAG CGATGTGAATGAATGTATCGTGTGTCATCAATCGTAACCAAGCTTGAACCGCTTAATGGAGCTTGGAGCGCCAG AATCATTGTGCGCAATGAAGAAAGGATGTTGCAAGAACCGGTGATGCTTTTGATAACGGCCCGCAGCACTAAT GCGGTTAAAGGGGCTAACAAAGCCCTTAAAT	1226	THSKVRRFRMGHIELATPVAHIWVYVNS LPSRIGTLLGVKMKDLERVLYYEAYIVK EPGEAAYDNEGTLVMKYDILNEEQY QNISRRYEDRGFVAQMGGEAIDLEE IDLITLLQSLKEEVKDTNSDAKKKKIKR LKVESFLNSGNRPEWMMMLTVLPVLP PDLRPLVALDGGKFVSDVNLVLYRRI NRNQRKRLMELGAPEIIVRNEKRMLO EAVDVLFDNGRSTNAVKGANKRPLK
HP0199	1227	GCTCATCAAAAAGAGTCTCCATTAATAATAAGAAAGTCAACACCCCAAGCTGACGCCCAATTAGCGCGAGAAA ATGTAGCCACCCAGCTAGAAAAGGGTCTGCTTCCCGCTGCGATGAAAAAGTCAAGCGCGGTAAATC CGGCGCTAAAGGGATCAAGGTGCGGTTCTGCGGCTTTAGCAGGGCTGAAATCGCTCGCACCGAATGGTATATG GAAGGGCGGTGCTTTACACACCTTAAGGGCTAAGATTGATTATGGCTTGTGAAAGCGATGACGGTATATGGTAT TATTGGCGTGAAAGTGTGGATTTTCAAGGGGAAGTTTGAAGAAAGGTATCCAA	1228	LIKKEVSINIKVHHPQADAQLAENVA TQLEKRVAFRRAMKVMQAAALKSGAK GIKVCVSGRLAGAEIARTEWYMEGRV PLHLRAKIDYGFAEAMTVYGIIGVKVW IFKGEVLQKGIQ

HP0199	1229	AGAAGGTAAGTAGGGCATGGGACAAAAGTTAATCCGGTAGGTTAAGATTAGGTATTAATAGGAATTGGACTTCCA GATGGTCCCTAGTGTCTGCACCGCTCCAAGCAATATTGATGAAGACATAAAATTAGGAAGTTCCTTAAAAAAGAG CTTTATTACGCTGGGTGAGCGAGATTGTGATTGAAAGAGCGGTAAAACTGCGGTACGGTTACGGTTGTAGCGGCTC GCCAGGGCTTATCATTTGTAATAAAGGCGGTGGATATTGAAAAAGTCAAGATGGCTTAAAAACGCTCATCAAAAA GAAGTCTCCATTAAATTAAGAAGTCAAAACACCCCAAGCTGACGCCAATTAGCCGCAGAAAATGTAGCCACCCCA GCTAGAAAAAGGGTCCCTTCCGCGTGGATGAAAAAGTCAAGCGCGGTAAAAATCCGGCGCTAAAGGG ATCAAGGTGTGCTTTCTGCCGTTTAGCAGGGGCTGAAATCGCTCGCACCGAATGGTATATGGAAGGGCGCGTGC CTTTACACACCTTAAGGGCTAAGATTGATTATGGCTTTGCTGAAGCGATGACGGTATATGGTATTATTGGCGTGAAAG TGTGGATTTTCAAAGGGGAAGTTTTCAAAAGGTATCCAATTTGAAAAAAGAGAGGCTAAAGAAAGAGAGAG CCTAGAAGAAGCAGAAAGAGGGAGGCAATAATCATGTTAATGCCAAAAGAACAAAATACAGAAAGCAAAATGAAAGGG CGCAATCGTGGAAAGCCCATCGGGTAACCTCCATTGCGTTGGGATATTGCGATTAAAGCCATAGAGCATGGGA GGATTGATTCACGCCAAATTGAATCCGCAAGGGTGCCATGACAAGGCACATTAAAGAGCGGGTAAGGTGTGGAT TAGAGTATCCCTGATAAGCCTTTGACCGCTTAACCCCTTAGAAACCAAGGATGGGTAAAGGTAAAGGCTCTGTGGAAA AATGGGTGATGAATATCAAGCCGGGCA	1230	EGK	1232	AEESKGSVAKYKIEAQYSIDFDSA SLFIPMPVVAASNVHLQGNHASYSML NFGVPYLQVDFLSTQKKQVHLSYEIA SYQLNERLFETSDFVAMGRYERDDAS VANIANQLKGTTPKESVRNFYAFIKHE MPKRQKALEGKENLPKRESI.PW FATIS KESMFVSLCHACGIKSAEVQGLKLGQ NSVWKNAPRVEVYLKDSFLAFDFQNN HKEVFIPLNHRHKMDQLDSALLATFGDA FALVDGRDLGNYESKLFKRVSYTIV
HP0875	1231	GGCAGAAAGTAAGGGAGTGTGAAAAATATAAAGTCAATACAGCATTGATTGATTCTGCAGAAACA CACTTCACTTTTCAATCCCATGCCAGTGTGTAGCGAGCAATGTGCATTTACAAGGCAATCATGCTAGCTATAAAAG CATGCTCAATTTTGAGTGCCTTATTGCAAGTGGATTTTAAAAAGCACTCAAAAAAGCAAGTCCATTGTCTTAT GAGATCGCTAGCTATCAATTGAATGAGCGTTTGTGAACGAGCGATTGTAGCAATGGGCGTTATGAAAGAGA CGATCGGAGCGTGGCTAACATTGCCAACCGCTTAAGGGAACAACCCCTAAAGAAAGCGTTCGCAATTTTATGCGT TCATCAAGCATGAGATGCTAAGAGACAGAGGCTTTAGAGGTAAGAAAATTTACCTAAGCGTGAGAGTTTGCCCC TGGTTTGCAACCATTTCAAAGAGAGAGCATGTTGTGCTTATGCCATCGTGCGGGATTAAAGCGCTGAAGTGCA AGGCTTGAAACTGGGTCAAACACAGCGTGGTGAAAAACGCTCCTAGAGTGGAAGTGATTTGAAAGATTCAATTTCTAG CGTTTGATTTCAAATAATACAAAGGAAGTTTATCCCGTTGAATCGTCATAAGACATGCAGTTAGATTCTGCGCTT ATTGGCGACTTTGGCGATGCTTTGCCCTGTGGATGGTAGGGATTAGGCAATTACGAGAGCAAACTTTTGAAAA AAGAGTGCTCTATACGATTGCTAAAGGCATGAATCTAGGAATATTCCTTGATAGCGGGCTTTCCTTTTAGGGA GTTTTGAAACGAAAGATTTGGCGTGTGACAAACCCCATCAAGTCTATACCCACCCCTAAAGGCTATTTTACCAT GAAAGCTTATTAGATTGTATCCAATCGCATTTTGCAAAAACGCCACCCAGCCACAGACTAGACTATGAAACGAG CGGGTTGTTTTAGCGGGCAAGACCTTACAAAGCGTTAAGGATTTAAAGCGCTTTTCATGCAAAAAAAGTAAAAAA AACTATTAGCACTAGCGCATGGTTGGTTGAAAAGCATGAAATAGACAAACCCATTCTAACGCCACAAAAACAT TCAAAAAGATTGCACATTCGATCTAAAATTTCTCCTTTAGGCAAGCAATCAATCACGCTTGTGAGCCCTTAAAGCTAT AAGCTTTTGGATATAAGCCTACTCAAAATCACCCACTACCGGGCGCAGCCAGATCCGCTTGCATTTAAG CAGCGTGATCATAGGATCGTGGTGAGGGGCTTTATGGGTGGCAGATGAAAACGCTAGGGAGTATCTTCAATTA AAGCGTGAAAAATAAGCCCCATTACTCATGCTCCATGCCGCTAGTTTAGAGTTTGAATTTAAGGAGCGGATCTATAAA ATCGCTTCCCCCATGCCCTGAACGCTTCATGCCCTTTTAAAGATCTATCCTTTTATTGATTGATCTTT	1234	VFETKDFGVFDKPHQVYTHFKGYFYH ESLLDCIQSHFGKNAHPAHRLDYETSG LVLAGKTLQSVKDLKALFMQKKVKKTY LALAHGLVEKSMKIDKPLTPQNIQKDL HIRSKISPLGKQSITLVEPLSYNPFLDIS LLKITPLTGRTHQIRLHLSSVIDHRIVGE GLYGVADENAREYLQKRENNAPLLM LHAASLEFEFKGAIYKIASPMPERFMPF LKDLSFFY		

HP0510	1235	GCCCTAAATTTAGTTCTGGCACAACCGGTTAGAAAAAGAACCGCTAGAAAAATGCAACAATTAGCCCTTAAAG CACCGCTTTGCGATGCGCACAACATGCTATAGGATTATGATGCTCAACCAATTAGCCTTTTAACTCTTTGAAAT AAAGATGCGGATATTGAAATATAGAAACGACCAACAATCTCAAAAAGATATCCGAGCGGACGGCTTGAGTT TGATGAAACTTGGCTAAGGCTAGGGGTATGATGAAAAAATGCCCTAATCACTACAGAGAGGTTTGGCTCT AAAGAAAGCATTGGCATAGCGCTTTAAGGGGGCGGATGCGCGGGAAGCACACGATAGGTTTATTAGAGG GCGAATACATAGAGCTTAGCCATACGGCGACTAACCGATCTATTTTGTAAAGGGCTTTAGAAAGTGGCCCTGTGG CTTAAGGATAAGCCGCTAAAAAATATGAATCAACGAGATGTTGGTTGAATGTTTAACTCTTTTGTATAAATAAT CACGCTTTACGATGAAATATTTCCCTTTTACGCTTAAAGGTTTACTATACATAAGGGATATTGCTAACG ATTAGCTGATTGGAAGAGTTTATTTGCAAGAAATTAATCTTGCCTTGTGATTAGTAACACAGGCAAGTGTGATA AACCTACTACAATTTCAATCAAGGAGCGCTAACTAAATAAATAAATGAACAATTCAGTTAGGCTTTATTATAGCAAAA ATTATCTAAGATTACAAAGGGTAGCGTTTCTGTTTGGATTAGAGCGTTATTTGATTGTTTGAATTTAACTT TTTGTATAATAAATCTTAACATACATAAATGACAAATTAAGTATTTAAAAAATTTTAAACAAAGGATATAAAT GAAAACCATTAGAAATAGCGTGTTATTGGAGCGTCTTACTCGCGGTTGCGTAGCGTTGAGGCTTATTTGACG CTTTG	1236	PKILVSGTTGLEKETLEKMQQLAKAPL LHAHNSIGIMMLNQLAFLTSLKLKDA DIEIETHHNLKKDIPSGTALSLEYETCAK ARGYDEKNALITHREGLSKESIGIAAL RGGDVAGKHTIGFYLEGEYIELSHTAT NRSIFAKGALEVALWLKDKAAKKEINE MFG
HP1464	1237	TGAAAAAGAAATTAGACAACCTTGCTGAAGAGGATGGGAATGAAAGTATGCTTATGCTTCAAGCGCTAAGGAGTT GCTAGAAATTGTCCAAAAACACCAAAAAAGCATCGCTGAATCGTGCTTTGAGAGAAAAACGCCCTGAAAAACCCACC CTGATGCAACGATGGTTAAATTTATCATGCGATGCTTGAGTGTTATGATAATGGGCTAATTTCTAAAGAAAGGTATC TGCCGTGTTCTTTGAAAGTAACACGATTGGCCCCAAGCATTAAACGCGCTAGAAAAACACCCCAAGCGGGGAAA GACCCCTTAGCCTTGATTGATTACATTTGCTTTACGCTCGGCCATTGCTG	1238	EKELDNLSEEDGNESIAFYDFSSAKELL ELCQKHQKSAIEIVRLRENALKNHPDA TMVKIYHAMLECYDNGANSKERYLP SLKVTRLAPSIKTRLEKHPTSGKDPLAL IDYISLYARAIA
HP1464	1239	AAAAAGCCTTTTGTACTCGGTGGAAAAAGATCAAGCCCTATGCCCTAAGATAGCCCTTAAATAGACTATTCTAGCC TGTTAAAAACATCCATCCACTTTAAAGGCATCTTTTGAATGCTTATAGTAGCGTTTGGGA	1240	KAFCSVEKIPYAPKDSPLIDYSSLVK NIQSTLKGTSFEMLIGSVW
HP1464	1241	TTATGCGGACACTTTGATTGATGAAGAGGGTGCTAAAAAGGTGTTGAAGCCGGGATTAATCCATTACGATCCGCA CCCCAGTAACCTGTAAAGCGCCAAAGGGCGTGCGGAAATGCTATGGCTTGAATTTGGCGAAGCAAGATGAG TTATCCGGGTGAAGCGGTGGCGTGTAGCGCGCAATCTATTGGGAGCGCTGAACGCACTCACTTTAAGGAC TTTCCATGTGGCGGACAGCGAGGAGTCAAGATGAGCGGAAATCGTAGCGAGCAAGAGGTTTGTGCG TTTTACAACTTAGGACTTACACGAATAAGAGGGTAAAAACATTATCGCTAACCGCCGTAACGCTTCTATTAGT GGTAGAGCCTAAGATTAAAGCGCTTTTGTATGGGAATTACGCAATTGAACGGTTTATGAAGAAGTCGTTGTAGCG TGAAAAATGGCGATCAAGAAAGCTAAATTTGTTTAAAGGAGAGCGGATATTGTCAAGCCAAAGCAATAGCCGCGT GGCGTAAAGATTAGGGGAAAGTGTTTGCCTTATGCTAGTGGGCATAAGGTGCATAAGGGGGGAAAGTATCGCTG ATATTATCCAAGAGGCTGGAATGTGCCTAATCGCATCCCTTATCGGAGCGAATTGCTAGTCAAGGATAATGACCCCT ATTGCGC	1242	YADTLDEEGAKKVVEAGIKSITIRTPVT CKAPKGVCAKCYGLNLGEGKMSYPGE AVGVAAQSIGEPGTQLTRTFHVGGT ASRSQDEREIVASKEGFVRFYNLRTYT NKEGKNIANRRNASILVPEKIKAPFD GELRIETVYEEVVSVKNGDQDEAKFVL RRSDIVKPSSELAVGGKIEGKVLYPYA SGHKVHKGGSIADIIQEGWNVNPRIPY ASELLVKDNDPIA
HP1464	1243	CTTTAAGCGGATGTTTACTCCCTTGATCATGCAAGCGGAGTTGAGCTTAAGAAACATTGATAATTTTGTGAAAAAGG CTCTGCTTTGATAGATAAATTTGACGCTAACCCCTATAAACGATTTTTGGAGAAAGGAAATAATCATGAGAGCTACG GCGATAAAATCTTTCACTCATCAGCATTAGCCCTATTGCTTATGCTTATGAGCATCAATTTAAACAAATGC TACCAGAGATCAGAACTTACGATTGAAATGCGAGTTCTTTTGAATCAGCAATGCGCTAAACCTTTGACTGAAGTGA GGCTCATTAGTATTTGAGCGCGGATTTATCAACACTAAAGAGATCGTTTTTAAAGCCAAAGACGGGAGATCAGC CATGGGAAGCACCAAAATGGATAGACTTGCCTCGCAACATGCTAAAAACCATGTTATGCAAGAGCGGCAAAAAGC ATGCTTAGCGGTGGCTTTGCTCTCTTATGGCGGGTGACCCACTTATCGGTTCTGTTTACGATTATCGTTTTC TCCTTTAGAAAAAGAAATTTCTACCTATAGGGCGGAAATTTGCACTAGGCTATGACATTAGCGTGAAGCGGATTGCGCA TTCTGGGGTGAICATTAAGCATGAAATATTTCTAGCTT	1244	FKAMFTPLIMQAQLSLRNIDNFEVKG ALIDKFDPANPYKTIFGERK
HP1464	1245	TTCAAAAGATGATGCAAGAAACCAATACCTTCTCATTTGAAGACGCCCTGAAAGATTGAGCCATGCTTTAAAAACGC GCTACAAGGAGATCACTGAACCTTTATTTAAATCAGCAAGTTAGAGATTTCTCCAAATTCCTCAAGTGGAGCGGAGCG TGAAATCCGCTATGAAAGCAATCTTTAGCCTCTTTTCTTATTGTTTAAAGCAACCCCAATAAACCTTTATT AGAGCGGTTATATTTCCCAAGTTACGCGCAATTTTAACTTAGCACCTCACTTTGTCAATTTAAAAAAAGCGCGCTTAT AGACCCCTTTCAATGGGGAATACCATATCATCAAAAGCCCATGATTAGAAAGCAACGCCAAAGCAACCGCAAGCGGA TATTTCCGCCAAACG	1246	QKMMQENQYLLIEDALKDLSHALKTRY KEITELYLKISKLEISPNSQVGSVKIRY ESNL

HP0070	1247	AAAAATTGGAGTTGTGGTCTGTAGGAAGCGGTAAACCGCCTTGATTGAAGCTTTAACGCGCCACATGTCAAAAAG ATTATGACATGGCGGTCACTAATGATATTTACACGAAGAAGACGAGATTATGTGTAAAAATTCGGTGATGC CAGGAGAGGATCATTTGGGTAGAAACAGGAGGTGTCGACACGCTATTAGAGAACGCTTCTATGAATTT AGAAGCGTAGAAGAAATGCATGGCGTTTCCCTAATTTGGAATTTGATTGAAAGCGGAGCGGATAACCTTT CAGCGACATTTCAACCCAGAGCTAGCGGACTTTACGATCTTTGTGATTGATGCTGAGGCGGATAAATCCCCCGA AAAGCGGGCCAGGAATCACGCGCTCAGACTTGCTTGTCATCAATAAGATTGATTTAGCCCCCTATGTGGAGCGG ACTTGAAAGTCATGGAAAGGGATTCTAAAAAAT	1248	KIGVCGPVGSGKTALIEALTRI-HMSKDY DMAVITNDIYTKEDAEFMCKNSVMPRE RIIGVETGGCPHTAIREDAISMNLEAVEE MHGRFPNLELLIESGGDNLSATFNPE LADFTIFVIDVAEGDKIPRKGGPGITRS DLLVINKIDLAPYVGADLKVME:RDSKK
HP0070	1249	TTTTAAACCGGCAAGGCAAGACATAGCCATACGCCCTTAAAGACGCTCCCAAGTTGGGCTCTCTCAAGGGGATA TTTTATTTAAAGAGAGAAATATCGCCGTTAATATCTTGGATTCTGAAGTCATTCACATCCCAAGCCAGAGCG TGGCAGAAAGTAGCGAAATATGCTATGAATAGGAACCGCCATCGGCTTATACATGCGGAGTCTCAATTTGAA TTTTAAACACCATTTGAAAGCCACGCTAGCGTTATTAGAAAGCTAGGGTTCAAAATCGTGTTTTAAAGTTCAAAA TTGGATTCCAAAGACGCTTAACCGTGAGCATGCCCTAATTTAAGGTCTCACTAGCGAGCGATT TAAAGTGCTCGTAAATAGAAAGAAATAGAAATAACAAATGGATAAGGAAAGCGTGAAAGCACTGAAAAA GCGTGCGTATGCCCCCAAAACTCCAAAGACAGACAAACGCTCATGTGGATAACGAAATTTCTGATTCTGCAAGTC AATGATGCGGTGTTCCCTATTGGATCTTACACGCAATCTTTTGGGCTAGA	1250	FKTRQGGKDIAIRLKDA PKLGLSQGDILF KEEKEIIAVNILDSEVIHQAKSVAEVAKI CYEIGNRHAALYYGESQFEFKTPFEKP TLALLEKLGQNRVLSKKLDSKERLTV SMHPSEPNFKVSLASDFKVW/K
HP0377	1251	TAAACCAAGCTTTAAATTTAGCCCTGGATCTTAACACGCGCTTGCACCACAGAGCATGTGCTACTAGTCAATTTAG AACATGAGAGCGGGGAAAGATTATTGGCACTTTAGAAAGAGATGACTATGATAAATAAACAATCCTTAAAGACT ATTTGTTCAATATGTGCTTTAAAGAGCGATCCAGCCAAATGCCCTGCTAGGAGTTTGTGCTATTAAAGATGCTTA AAAGATGTATGCGAGTTGTTTGGAGCGGTGGCGTGAAGATTGCTATTATGCTAGATCACCCCGATTGTT ACGCTTCAAACTCATGGATAGTTTGGCATCGCTGTTTGTATCTAATCGCTTATTGGATTGGATAACCATGG TATTCCTAATGACATTAATGATAATGAAGAAAGCGCCCAAAACACTCCCTTAAAAAATACGCTAAAAATTTGAGCGCT TTAGCCCAAGACACGCTTTAGATCCAGTCAATGGCAGAGAAAGAGATTTTAAGAGTGATAGAAATTTTAGGCGG CAGAAAAAGAAATAACCCGCTTTTAAATTGGCGAAGCGGCTAGGGAAACCTCCATCGCTGAAGCTTTGGCTTTAA AATCGCTCAAAAAGAGTGCCGGAG	1252	NQALNALDLNHALCTTEHVLVILEHE SGEKIGTLERDDYDKLKQILKDYLLQY VPLKSDPAKMPARSFVLLRMI.KRMYA SCFESVGVVEELLILMLDHPDCYASKLM DSFGIARLYSNPALLDLDNHGPNDIND NEEAPKNTPLKKYAKNLSALA QDNALD PVIGREEEILRVIEILGRRKKNINPLIGE AGVGKTSIAEALALKIAQKEVFE
HP0377	1253	CTTATACGGTTTTAGAGACAGCGGGGAGGCAATTTATATCCAAAGAGTTGCTATCATTCGCCATCCCGCTTATTC GCCCTTTCAAAGCTGAGTGATCGATATGGCGGTATAGTTTGAAGTGGGAATACCGGTATGACAGGCCATTTT GTGGGGTTCTAAAGGATTGGCCCTGATTGACAGGAGGATTATCGCACACCGGATTGGCATGAAAGCAC ATGTTTGATCCTAAAGCGTTGTGCGCACAGCATCATGCCCGCTATAAGCATTATTACAAAAAGAGCGATT GACACCGCTTATGCAGAGCTTTGACGCAAAAAAGGTTTGGCGTGCTTATGACACAGAAACGCGGTGAAAT AGGAGCGTAGAAGAAAGCGAAAAAGCCTATTAGAAAGAGCTAAAAAATCACAGCGGATATGAAAGACAAAGAG GTGCTAGAAGCGGATTGAGAGAGGTGAAGTGTAGAAATTTGCGCTTATGATCGCTTATTGAATAGCTTGGGTAATTC CAGGATCAACGCCCAATCAAAACGCTAAATAAGGGTGAATGATGATTAGAAAGTTGAGAGGTTTTGCGTATGCG TTTTTACCATTCTTTACGCTCTTTTGTATGCCCTATATTTTAGCATGTATAGAAAGCAAAAAAGGCATTATGGA TTATGAGCGGATACGGTACTTAGCGTTAATGATGCTTTAGAACGAGGATTGATTGAACCAAGCAAAAAAGTTCA TGATAATGGCATAAAGGAAAGTTGAAATGGATTTTAAACGACCATATAAATGTTTTGGCTTATTGAGCGCTTGT GATTTTAGTTTAAACCATCTATGAATCCAGTTCGCTCATTAAAGAAATGCGCGACAGCAAAATCTCAAGGTGAGCTTGT AGAAATGGGCAATTTGATTGATGGGATAGGGGAGTTTGCCCAATAATGTGCCAGTAGGCTGGATCGCAAGCTTTATGT GCACGATTGTGTGGCT	1254	YTVLETAGRQIYIQEGCYHCHSQLIRPF QAEVDYRGAYSLSGEYAYDRPFLWGS KRIGPDLHRVGDYRTTDWHEKHMFD KSVVPHSIMPAYKHLFTKSDFTAYA EALTQKKVFGVPYDTENGVKI.GSVEE AKKAYLEEAKKITADMKDKRVLEAERG EVLEIVALIAYLNSLGNRINANQNAK

HP0377	1255	TAGCCATAGAAAGGGCTAAAAAGCTTTTAAATTGCCAGTTCGTAACGTGCAAGCGCATTCAGGCTCACAAGCCCAAT AACGCTGTCTATCACGCTCTTTTAAAGCCTTATGACAAGATTTTAGGCATGGATTAAAGCTGTGGAGGCGCATTTAAACG CATGGCGCTAAAGTGAGTTTAAACCGCAAGCATATCAGAGCTTTCTTATGGCGTGAATTTGGATGGCTATATTGAT TATGAAGAGGGCGCTAAAGTCTCAAGCGTTAAGCCAGAAATCATCGTGTGGGCTTTTCAGGCTATCCCAAGGGA GATTGATTTTAAAGAAATTTAGAGAAATCGCTGATGAAGTGGGCGTTACTATTAGCGGATATAGCCCATGTGGCAG GGCTTGTGGTAACCGGTGAGCATGCCCATCTTTCCCGCATTTGCCATGTGGTTCAAGCACCATCATAAAGACCTTA AGAGGCGCTAGAGGGGGGATTATTTAACTAATGATGAAGAGATAGCGGCTAAGATTGACAAAGCGGATTTTCCAGG AACTCAAGCGGGCTTTGATGCTGATGCTGCTAAAGCGGTGGTTTAAAGAGAACTCTAAACCCAGAAATTTA AAGCTTATGCACAATTAGTGAATCTAACATGCAAGTTTGGCTAAAGCGTTAAAGAAAGAAACCATAGTTAGTGA GTGGTGGCATTCTAACCATTTGCTTTTAAATGGATTTTATAGTAAGCCTTATAGCGGGAAGACGCTGATATTGCAT TAGGGAATGCCGAATCACCGTGAATAAAACACCATTCCTGGTGAACGCGCAGCCCTTTTGTAAACGAGCGGGAT AAGGATTGGCTCAGCGGCATTGA	1256	AIERAKKLFNCQFANVQAHSGSQANN AVYHALLKPYDKILGMDLSCGGHLTHG AKVSLTGKHYQSFSYGVNLDGYIDYEE ALKIAQSVKPEIIVCGFSAYPREIDFKKF REIADDEVGALLLGDIHVAAGLVVTGEHA HPFPHCHVSVSTTHKTLRGPGRGIILT NDEEIAAKIDKAIFPGTQGGPLMHVIAA KAVGFKENLKPEFKAYAQLVKSNMQV LAKALKEKNHKLVSOGTSNHLMLMDFL DKPYSGKDADIALGNAGITVKNKNTIPGE TRSPFVTSGIRIGSAAL
HP0377	1257	CGTATGAGCCTATTGGGCGATTGGCACCAAAAAAGCGCTTCTTAGAAGATATTATCTCACGCGATGGTTTTTAA AGCAATCTTAAATCAAAAAACGCCCTTGTGTATGGGGAGCGTGAACACACAAACGCTAAAGAAATTTTAGGG ATTGATAGCGTGGATGGCTTGTGATCGGGAGCGCTTGGGAATTAGAAATTTTAAACAATCATTTTCAATTTTAA TAAAGGAAATCATGGGATTTTAAAGGTAAAGGCTTATTGAGGGTGGCGAACAATAATCCATCGCTTAT GGATCGCTCAATCTTGTTCATCAATCAAGGGCTACTTTGGCTTCACTTATTGAATGAGAGTTAGAAAAGCGCGTA AGCCTATCGCGAGGAATTGAATAGCCCTATGTGATGAATTGGATGTGAGCAAGAGAGCATTTCAAGTCGCT ATACAATAGCGTTAAAAAGGATTTAGGCTCATTTGATTTTATGTTTATAGCGTGGCTTTGCCCTAAAGAGGCTTT AGAGGGGAGCTTGTGGAACTTCTAAAGCGCGTTTAAACCGCTATGGAATTTCTGTTTATCTTAAAGAGCT GACAAACACCTTAAACCTTTATGATAACCGGCTGTTTGAACCTTAAAGCTTGGGTAGCACCATAA	1258	YEPIWAIGTKKSASLEDIYLTHGFLKQIL NQKTPLYGGSVNTQNAKEILGIDSVD GLLIGSASWELENFKTIISFL
HP0377	1259	CGTTATTTCTCAGCGGATAAATACGACTCCGGTTCGGGTGGCCAGCTTTCTAAGCCTATCAATAAGATGTG GTGAATACGAAGACGATGAGAGCCTTAATAGGAACGCAATGAAGTGTGAGCGCTATTGGTAAGCGCATTTAGG GCATGTGTTTAAACGATGGCGCTAAAGAAATTAGGGGCTTAAGGATTGCTCAACAGCGGCTTTAAGGTTTATCC CCTTAAAGACATGGAAGAGGGTTATGCGAGTTTATCCCTTATATCAAAAGGGTGAATTGAAAAAATACATCA ATGATAAAAGTCGCATTAAAGGGTAATGACTAAGCCCTTAAGGGGGTTAAATGAGGGTTTAAAGCGTTTGGGT TGCTTTATGGGTTATCTTAAAGAACGCTAAAGAACCGCTTAAATGATTTTAAATACCTTACCTTAAAGAACGCTCT CTTTAAGCTTTATGGCTTTGTTCTTAAATATCAATAACTAAAGCTTTTAACTTTTAAAGATGGGTTTAAATTTA TTTTTGTTCAAACTTATTTTAAAGGGGTGGGGTTATCCCATTAACCCCAACTAAACCCCTAACCCCT AAAGAAGTGCTTTTATAGAGATTATCGCTTGTGTAAGCTCTTTGATATTAATTTTAAAGATGCCCT	1260	LFSSADKYDSGCGWPSFSKPINKDVV KYEDDESINRKRIEVL SRIGKAHLGHV FNDGPKELGGLRYCINSAAALRFIPLKD MEKEGYGEFIPYIKKGELKYYINDKSH
HP0377	1261	CTAGCTTGATGACTGATAGCGTGAGTTTGAAGATTTCTAAAGCGTTTGAATGCGGATTTAAGATTTGATTTTCATAA AAATAAGCGTTTCAAGCAATTGCAGCTCAAGCTCAATACGCTCTAAAGCCTTA	1262	SLMTDSVSLEDSKKRLNAIKDLIFHKNK AFRQLQLKLNTPKAL
HP0377	1263	ACAACTTGAGGTTTCTAAGGAATTGTAGAGCCACAGAGCCGGTGTAGGGTTGTGCGCCAGATCACCCCTTTTG GCATTTTGTAGAAGCTAAGGGGATTGAGGGCTTGGTCCATTATCTGAATCAGCCATAAGGGACCAATCAATCCT GAAAAATACTACAAAGAGGGCGGATGAAGTCTATGTCAAGCCATCGCTTATGATGCAGAAAAAGAGCGCTTCACT CTCCATAA	1264	QLEVSKELEATEPVLGVRQITPFGIF VEAKGIEGLVHYSEISHKGPVNPEKYY KEGDEVYVKAIAYDAEKRRRLSLI

HP0377	1265	CTATATTCTTTTATGCTACAATATTTTACAGAGTAATTTATCTATTCTCAGGTAAGTAAGGAAGGAATGAAATTA AAGAAACGAAAGTTGCGCTGCATTGCTAAAGCGTTTACCTGCCACTATTGTTCACTACGGGTTTCATTAGGGC GGTTACTTATGAAGTGCATGGAGATTTTATCAATTTTCTAAAGTGGTTTAAACCATTCGCCCATTAATCCTGTTAAA GGTATCTATCCACAGAACTTTTGTAACTTACGGTAAGCTAGAGGGTCTGTGCATTTAGTAGGGGATGGAC CGTGAATTTAGCGGTGTTTGGCGGACAGGCTTATGATGGCACTAAGTATGATAGTCTTTGTATGAATGCCACTAAATGTGGCAG CCCCAAGCTATTGGGATAAACTTCTTGGGTACTGATTCTATGATCTTTGTATGAATGCCACTAAATGTGGCAG CAATCAGGGCCAGGTGGCTATTAAACCCTAGAGGTATTGGTTGGGAATACATGGTGAGTGGAACGGCTTGTTC CTAACTACTATCCGGCTAACGCCCTACTTCCCTGGTGGCTCAAGGGCTATCAAGTCTATAAAGCAAAATTTGACCTAT GATAGCGACAGGGTCCATATGTAATGGGGCTTTTACATTAAGTATGAATTTCTTCTTTAGTGGTGGCTGGTAT GTTCCAAAGGTTTATGGGACTTTTCAAGCTCACTAAGATATGAATTTCTTCTTTAGTGGTGGCTGGTAT CGCTGATGGTCAAGTGGTGGTCCCTATCTATCTGTAAGGCTTGGGGGTTTCAAAAGCGGTTATTTATCGCC CTACAAAGAAATTTGATGATCCACCTTATGTGATCTTATCCCAATGGTAGGCACATTCCTGGTCTAAATAGAAT ACGATACCAATCCTGAATTTAGCGGTAGGGCATTAGGAACAGAACGACTTCTATGCGTTGTATGACTATCGTTGG AATAACGCTGAATACGG	1266	LYSFMQLQLFQSNLSILR
HP0377	1267	GAGTGAAAAGGAAGATGTCTTTTGTAGAAGAGTTGGCCAGCAAGGATTAGCGCCAGACTATATCACGATCGAT ATTGCGCATGGCCATTCAATTTCTGTCTATTGAGATGATCCAAACGCATCAAAACGCATTTGCCCGAACTTTTGTGATT GCCGGGAATGTTGGCACGCCAGAGCGTCCGTGAATTAGAGAACGCCGTGCTGACGCTACAAAAGTTGGCATC GGGCTGGGAAAGTGTATCACTAAATCAAAACAGGTTTGGCACGGTGGTGGCAACTGGCGCTCTTAGGT GGTGGCTAAAGCAGCAAGAAACCCATTATTGCAGATGGCGCATTCGCACGCATGGCGATATCGTAAATCCATA CGCTTGGTGGCAATGGTAATGATTGGCTCGCTTTTGCAGGGCATGAAGATCATCTGGAGAGACAAAATAGA AAATGGTATCGCATATAAAGAAATTTTCCGTTCAAGCTTCAAGTCCAAAGGTGAAGAAATATTGAAGGCAA GAAATTTGGATCCAACATAAAGGCTCATTAAAGACACGCTGTTGAATGCATCAAGATTTGCAATCTTCAATCTC CTATGCAAGTGGGAGAGACCTTGAAGCGATTGAAAGGTTGATTATGTCATTGTGAAGAAATTTCAATTTCAATGGAGA CGCAATCTAAAGATCAATGAACAAAAGCGGAATACAGAAAAGGGTTTCAACCTCTTCTTCAAGCCATTTGCT TTGAC	1268	VKKEECLFVEELAKQGLAPDYITIDIAH GHSNSVMIQRIKTHLPETFVIAGNVG TPEAVRELENAGADATKVGIGPKVCI TKIKTGFGTGGWQLAALRV/CAKAARK PIADGGIRTHGDIVKSIRFGATMVMIGS LFAGHEESSGETKIENGIAI'KEYFGSA SEFQKGEKKNIEGKKIWIQHKGSLKDT LVEMHQDLQSSISYAGGRDLEAIRKVD YVIVKNSIFNGDAI
HP0377	1269	AGGTGTTCAAAGACAGCAAAAAGACGCTTGGGGTTCATCTATGAGATCAGCGAGTTTCATGAAGCCCTATACCGCA TTGCTAAAAAACAAGACCGATAGCTCTATTATTAGGTATCTCCCTCTAGGTATTGGCCAGCATTTTAAACGACT GCCCTTATGTCAATACCTGATTTGACGCTTTGAAAAGCTTTTGTGCTTATTATTACCAACTTGGATTGCAG GAGCACGATCACGCGCATCAAGCAACCAAGTATCAACATTATCAAAACGTTAAAGCAATGAAGCGTTGAAACC ATCAAGAGCTTATATTGAATAGCATCGACTCTTATAACACCTTTGATCAATACCTCTATAACTTATGGATAGCTCTT CTGTTATCATAGCAATGGTGGTCTGCTTACGCTTAGCTTATTTATGCGAGATGAAGAGAAACCCCAT TTATCGCTATGATGCCGAACCCAAAGTGGAGCATATTTGCCACAAACGCCCAAGAGGCGAGTCAATGGAACGC GGATTTTGACAAAGAAAAGAGAGAAATGGTAAATATATCGCGAATTTAACCTTTTAAAGCGTAAAGAAACGC GCATGCTTTAAACGGGATTTGATGAAGAAAGAAATTTATGGAGGCAAGACACGAGCAAGTATTAGCTGTTA TGACATCACTAAAGAAATGTATAGCAATTTAGGAATGAGAAAGTCCCTCCAGAGCGGATACAAATCTTTGTA TAACACTATCAGCCTGTTTACACATAGAGGGCA	1270	VFKDSKKDACGFIYEISEFNKAYTALLK KQDRYVYLLRYLPSRYWASILTALYV KYPDFDALKKLLVSYYYQTWAGGTIR IKQTSINIKNVSKNSVETIKELINSIDS YNTFDQYLYNLWDSSSVYHSHKWVRPV LALANYFMADEEKPHFIAMDAETQVEH ILPQTPKRGSQWNAODFKIEKREEWVN NIANLTLLKRKNNAHALNGIDFDEKRIY GGKDTSKVISCYDITKELY:SNYRKWNE KSLQERYKSLYNTITPVLHIEG
HP0075	1271	TATTTTAAACGATGAAAATTTTGGGACTGATGGCGTGAAGGCTAAAGCAGGGTGAAGCTACCCCATGTTGT GATGCGTTTAGGCATTGCTGCGGATTGTATTTTAAACCATCTCAACGAATAAAATCTAATCGGTAAAGACAC CAGAAAAGCGGCTATATGTAAGAAACGCTTTAGTGAGCGCTCTAACTCCATAGGCTATAATGTGATTCAATAGG GCCATGCCACCCCTGCGATTGCGTTTAACTGAAGACATCGCTGTGATCGGGTATTATGATAAGCGCGAGC CACAAACCTTTTGAAGATAATGGCATTAAAGTTTTCATTTTATGGCTATAAGCTTAAAGAAAGAAAGAAAGCGA TTGAAGAAATCTTTCATGATGAAGAAATTAAGTCTAGCTATAAGTGGTGAGCGTGGTAGCGCTAAAGG ATAGACGATGTCATAGGGCGCTATATTGCACATTTAAACACTCTTCCCAACATTTGAATTTACAGAGTTAAGGA TCGTGCTAGATACGGCTAATGGCGCGCTTATAAGGTGGCTCCGGTCTTTTAGCGAGCTTGGGGCTGATGTT AGTGATTAATGATGAGCCTAACGGGTGTAACATTATGATCAATGCGGGCTTTACACCCCAACCAATTAAGCCAGG AAGTGAAAATAACCGC	1272	FYNDENFWD

HP0073	1273	TAAAGACGATTTAGCGGAATCATGCTTTAGCGGTAAGCCCTGGCATGATAGGGGCGATGCGCAAGATGTGCAA TTAAACATCGGTCCAAATGCAAGTTAAGGATCATTGCAATCCTTTGAAATAATCCATAACACTGAAGATGGGTTT GCCAGCAGACATGATATTGTTGGGGGAAACGCTTTTAGATTGCGCTTTCCCGTTATCCCTTTGAA AACGCGCATTTAAGGCAACACACGATTTCTTTGCGCTAGCTCTCAATGCTCTATAGTGAATCATTTGCGCA GGCGAGTGGCGCAATGATGTTTAAATCAACCGCTTGACACCAAAATCTCTATTACAGATGAGAAAC CATCTATTATGACAACACGATTTAGATCCCAAAACCGGCTTAATAACATGTCATGTTGATGGCTATACGCAT TATTTGAATTTGGTCTTGTCAATGCGGCTAGAGCTCTCTGCTGCGAGAAATGCAATGAAGAAAGCGAAGGGT GGATGGGCGAGTGAAGAACCGCTAGTTCTCATTTATGCGTGAAGCTTTAGCGAAAGGCTCAGAACCTTTATTGC ATTTAAGAGAAATAATCGCTCGCTGTTACGCAACACCGCAAGGTTTGAAGCACTTCAAAAAGATTAAAG TCCTTTAGTCTTTTACTCCCTCTTTTGAACCTATAAGCTGAAGGCTGAATTCAGTATGGCTGCTTTAGAAA GCTCTACAAATAGCGGCTTGGTTGTTTGAAGGTAATCTTTTATAGAGCTCAAGTTCTCACCATTACA CCTAAGGCCAGGCTTGGTTGAAGTGGTTGTTTAACTTTTAACTGCTAAGATGTAATAGCTTGAATCTGT TTGAGGTCGTGCGCAAGATGATGCAATACCTGCTGCTGCTGCTTTTCTAAACCGATCTTAATTTTCCACC CCTATTTGTC	1274	KDDLAEIMLLAVSPGMMRGDAQDVQL NIGPNCKLRITSQSEKIHNTEDGFASR DMHIVGENAFDFAPFPLIPFENAHFK GNTTISRSSQLLYSEIVAGRVARNE LFKFNRLHTKISILQDEKPIYDNTILD KTTDLNMMCMFDDGYTHYLNVLVNCPI ELSGVRECIEESEGVGDGAVSETASSHL CVKALAKGSEPLHLREKIARLVTQTT QKV
HP0073	1275	AGCAAAAGGATAATCTTACAGGTTGTTGAAGATACCCAGCTCAAGAACCCACATTATAGTGGCGGATTTGCAA GGCAATGAACGCGTGTAAAGCAATGAAGAGATTCAAAAGCTCATCAAGAAAGAAAGTAAATGATAACGGCAC GAGCAAGCTTGTCCAGCCTAATAATGAGGAGTAATGAAGCTCAGGCTTTGGCTGGGAGCGGATTTTAGGG AGCGCGCGGGGCGATTTAGGGAGTATATTGGTAATAGCTTTCAATACCCCTAATACCAGCAAAACGCCCA ACGGACCTACAAATCCCAAGCTTACCAAGCTCTCAAAATCTCTTTCTAAAGTGCGCCAGTCTTCAAGCAT GGCGGAGCGAGTAAGGACAGCGGCTTTTGGCTAGTAGGCTACTAGTTCACCGCGGTAAGCTCTGG GACAAAGGGCTTTAACTCATATTTAATTGATTCAAGGCTAAATAAGCAAGTATTCTTTAAACCTTTAGACAATA AGACCTTAGAAGAAATCGGCTAGATTGGCACAGCAATGACGACATGTCATCTATATCGCTGATGAATGGTGGTT GTCTCTCAAAAGAAAGCGGACGCTTATTATGACGCTTGAATGAGCTTTATGACATGTTGTAGAAACGGCTGAAGA GGCATTCAAAACGATCGCTTTTGAATGGATATCTTACGCGCTCATCCCTATGATCAACAGAGTTTGAAGA AGAGTGCAATGGCATATTACGGGCGTTTGAATGGCGGGGCTTGATGGCAAGCTTATTAATTAATCTGGAAT TTACGCTGATACCCCACTGCTATGAACGGGCTGATCAG	1276	QKDSYKVEEYPSRTHIVRLQGN ERVLSENEIQKLKEEAKIDNGTSKLV QPNNGSGNEGSGFGLSAILGSAAGAI LGSYGNKLFNNPNYQQNAQRTYKSP QAYQRSQNSFSKAPSASSMGGASK GQSGFFGSSRPTSSPAVSSGTRGFNS
HP0073	1277	CACCGCTCAACCCCTTTAAACCATGCTAAATAAACTCAAGCTTGAATGGGTGAGATTGAGGTTGGAGCATT TGATAAAGTGATTTATTAGATCAAGCCCTCATAGGCAAAACCCACGAAGCAACCTGCCACTTACACGGGAGTG ATGATGAATCAGGATTTATTGCGAGCAAAAGAGCTAAATTTAGGCTATAGTGGAGCGCTTTTAGCTTT AATGTTAAAGGAGGCGGTGCGAGAAATGCCAAGCGGATGGGACATTAATAAGAAATGCACTTTTGCCTGATGT GTTAGTCCAATCGGATAGCTGTAAGGCGCTAAATACACCCCAACCTTTAGAAATCAAGGTGAAGGCAATCCA TTGCCGATGTGTTGAACATGAGCGTGAAGGCTTATGAATTTTGGCAAAACGCTACGACTTAAGTGGGGGAGGCTCA AAAGCTAATAGCTAAAGAAATGAGTAAATAAGACACAGGCAAAACCTTTATATTTAGATGAGCCTACTACCGG TTTGCAATTTGAAGACGTGAATCATCTTTTCAAGCTTGCATTTAGTGGCGTTAGGCAAT	1278	TAQTLNHAKKTQSLNGVEIVGLEHLD KVYLDQAPIGKTPRSNPATYTGVMDEI RILFAEQKEAKILGYSASRFSFNKGG RCEKCGDGDIEKMHFLPDVLVQCD CKGAKYNPQTLEIKVKGKSADVLNMS VEEAYEFAKPKIAVKLKTMDVGLG YITLQGNATTLSSGGEAQRIKLAKELSK DTGKTLYILDEPTTGLHFEDVNHLLQVL HSLVALGN
HP0762	1279	GCATTGAAATAGACCAAGCGTGGTTGTTAGCGGTAACCCCTTCTAAAGAGCCTTTATTTTGTTCAAA ACAACTAAACCCCATGTTGATTTAGTGGCGGAAATTTCCCTTAAGCGATGGTGGTTAATTTGTCTCCA CCAACTTTCTAATCTTACTGATAAAATCCGGAGTCTAATAAGCCATTGCTTTTACACCTGGACAGA GAGCAATCAGCGATGCGGTTTATCATTAACCTCGTTTATAGGGTTTTTCTTATGGTGGTGAAT ACCGAGTATTTCTATGGCTAGCTGGAATTAATAAATCTTTAGAGAAATCGTAAATAAGCGTTTAG AATACGCGCAAGGCAATTTGAACAGCCTTAACCAATTACGCAATCAAAAGAAAGAAAGCTTTGTTAAAGA TTTTAATGATGAAGAGTCCAGCGGATTTAGAAAGATTTTAAATAAGTTG	1280	IEDQQSVVWSGKTPSKEAFYFLQNK NPMFDYSRAEFFPLSDGWFNFSVSTNF SNSLLKNPESIK
HP0762	1281	TCACGCTGTAGGTTTTAGAAAAAACCATATCCCTCAAAACTCTACTAACCTGAGCTCTCAAGATAAAGAATT GAGCGCTGAAATCAAGCAATGTAACTACTACACCTTAAGAGACGCTAACACACGCTCATCAAGCCCTTATCC CTATAAGCCAGGATTTACAAATCCATATTTACAAAAAGGGAGGATTTATTTTAGACTTTATCCCATTTATCTCAC TCGTAAGAAAAACCTCCTCTTTCTTACAACTTGGCCTATCAAGATATTCAAGCCCAATGACCCCTT	1282	TLLGFLEKNHIPQKLYNLSSQDKELSA EIQSNVTYTLRDANNTLIQALIPISQDL QIHYYKGEDYFLDFIPIFTRKEKTLIS LQTSYQDIKATNDPILLANQLMNAYKK

		TTAGCCAACCAATTGATGAACGCGGTATAAAAAAGCGTGCCCTTTTAAACGCCCTAGTGAAAAATGATAAAA			SVPFKRLVKNDK
HP0762	1283	TGTTTGATGTGAATAGGGGGATAGCATTATATCAACAATCCATTATGAGGGAAGCGCGAAATTAACACGCCGC ATGATTGAATCTTTGAGTGCGAACAGCAACGAGATTTTCATGGGCTGGATGTGGGCTTGAATGACGGGAAATTGC GTTTAGATCAACTAGAAATACGATTCTATGCGTATCCAAGATGTGTATATGCGTAGGGGTACTTAGACGCTCATATTT CTTCGCCCTTTTGAACACGGATTTTCTACCCATGACGCTAAGCTTCATTATAAAGTCAAGAGGGGATCCAATACA GGATTTCAGACATTTTAATAGAGATTGACAACCCGGTAGTCCCTTAAAAACCTTAGAAAAAGCGCTTAAAGTGAAAA GGAAAGATGTCCTTTAATTAGGCAATTTAAGAGCGGATGCGCAATTTTAAACCCGAAATCGCCGATAAGGGTTATG CGTTTGGGTGGTGAAGCCAGACTTGGATAAAGATGAAAAAAGCGGCTTGTGAAAGTCAATTTATCGTATTGAAGTG GGCGATATGGTGATATCAATGATGTCATCACTTTCAGGGAACCAAGCGCACGAGATGATGATCAATAGAAAGGGAGTT ATTGTTAGGGCCTAAGGATAAATACAACTTGACCAAACTGAGAAATTCGAAATTCCTTAAGCGCTTAGGATTCCTT CTCTAAAGTCAAAATTGAAGAAAAAGGGTTAATAGCTCCTCATGCTGATTTATAGTGAGCGTAGAAGAGGGCGTA CTGGCGAGTTGCAATTTGGGTAGGCTATGGCTCTTATGGAGGGCTTATGCTTAATGGAGCGTGAGCGGAAAGAAA CCTTTTGGCACAGGGCAAGCATGAGCTTGATGCTAACATCGCTACAGGGGGGTAGATCTTATCCGGGCATG CCAAAAGGAGCGGGCGTATGTTTGCCGGGAATTGAGCTTGACTAATCCAAGGATTTTGACAGCTGGTATAGCTC TAGCATCAACCTTTATGCGGA	1284	FDVNRGDSYIKQSIYEGSAKLRKRMIE SLSANKQRDFMGWMWGLNDGKLRD QLEYDSMRIQDVYMRRGYLDHISPPF LKTDFSTHDAKLHYKVKEGCIQYRISDILI EIDNPVPLKTEKALKVKRKDVFNIEH LRADAQILKTEIADKGYAFVAVKPDLDK DEKNGLVKVIYRIEVDGMVYINDVIISG NQRTSDRIIRRELLGPKDKYNLTCLR SENSLRRLGFFSKVIEEKRVNSSLMD LLVSVEEGRGTQLQFGLGYGSYGGLM LNGSVSENLFGTGQSMSTLYANIATG GGRSYPGMPKGAGRMFAGNLSLTNP RIFDSWYSSTINLYADYRISYQYIQQGG GFGVNVGRMLGNRTHVSLGYNLNVTK LLGFSSPLYNRYYSVNEVWSPRQCST PASVINRLSGGKTPLQPESSCPGAT TSPEIRGIWDRDYHTPTSSFTLDVSYD NTDDYYFPRNGVIFSSYATMSGLPSSG TLNSWNGLGGNVRNTKVY3KFAAYHH LQKYLIDLIARFKTQGGYIFRYNTDDY LPLNSTFYMGGVTTVRGFRNGSVTPK DEFGLWLGDDGIFTASTELSYGVLKAA KMRLAWFFDFGLTFKTPTRGSFFYNA PVTANFKDYGVIGAGFERATWRAST GLQIEWISPMGPLVLIFPIAFINQWGDG NGKKCKGLCFNPNDMDDYTQHFEFSM GTRF	
HP0762	1285	CCGATAAGGGATTAAAAAGGTGTTCAAAGACAGCAAAAAAGACGCTTGCGGGTTCATCTATGAGATCAGCGAGTTC ATGAAAGCCTATACCGCATTTGCTAAAAAACAAGACCGATACGCTCTATTTATTGAGGTATCTCCCTCTAGGTATTGG GCCAGCATTTTAACGACTGCCCTTTATGTCAAATACCCGTGATTTGACGCTTTGAAAAGCTTTTGGTGCTTATTATT ACCAAACCTGGATTGCAGGAGGCGATCACGCGCATCAAGCAAAACAGTATCAACATTATCAAAAACGTTAAAAAGC AATAAGAGCGTGAACCCATCAAGAGCTTATATTGAATAGCATCGACTCTTATAACACCTTTGATCAATACCTCTATA ACTTATGGGATAGCTCTTCTGTTTATCATAGCAAATGGGTGCGTCTGCTTAGCCCTAGCTAATTTTTCATGGCAG ATGAAGAGAAACCCCATTTTATCGCTATGGATGCCGAAACCCAAAGTGAGCATATTTTGCCACAAACGCCCAAAAGA GGCAGTCAATGGAACCGCGGATTTTGACAAAGAAAAAGAGAAATGGGTAATAATATCGCGAATTTAACCCCTTTTA AAGCGTAAAAAGAACCGCATGCTTTAAACGGGATTTTATGAAAAAGAAAAATTTATGGAGGCAAGACACGAG CAAAGTGATTAGCTGTTATGACATCACTAAAGAAATTTATAGCAATTTATAGGAAGTGAAGTCCCTCCAAAGA GCGATACAAATCTTTGTATAACACTATCACGCTGTTTACACATAGAGGGGCAAGAGATGATTTTGAAGATGATTT TGATCTAGAAATGATTAAAGATTGCCAAGCATCAAAACAA	1286	DKGLKVKFKDSKKDACGFIYESEFMK AYTALLKKQDRYVYLLRYLPSRYWASI LTTALVVKYPDFDALKKLLV3YYQTWI AGGTTRIKQTSINIKNVKSNIKSVETIKE LILNSIDSYNTFDQYLYNLWIDSSSVYHS KWVRPVLALANYFMADEEKPHFIAMD AETQVEHILPQTPKRGSQW3NADFDEKE KREEWVNNIANLTLLKRKKNAHALNGD FDEKRKIYGGKDTSKVISCYDITKELYS NYRKWNEKSLQERYKSLYNTITPVLHI EGQEDDFEDDFDLE	
HP0156	1287	TGGATTTGCCACGAGCGGTAGGATCTTAAACAAATCACGCTCACTTACCAAGATATTGATGGCTCTATCCATTCTA AAGTCGTGGGCATTGATAAAGGCATTGATTGGCATTACCCCTTAAACCTCTCCCAACACACCCCTTGATCCAGCGGCC TTTGAAAAACGCTA	1288	DLPTSARILKQITLTYQDIDGSIHSHKVVG IDKGDWVHYPLKLSQHTLDP3AAFEKR	

HP0452	1289	TGAAGCAAAGATTATTGCGAATAAGAGGGTAAAAACACCACTCTCTATTGGCTTTACAGATAAGGGCGGAGAT TTTAGTGGCGAGAGCGCCAAAGACAAAGCGGTAAACCAACCCAGAAAAACCAATTTATTCTATTAAAGAATCATGG GTTTGATGTTAATGAAGATAAGGCTAAAGAGCCGAAAGCGCTTGCCCTTAAGATTGTGGATAGGAATGGGCT TGCGCGATTGAGATTTCGGGTAAAGTTTATACCCCTCAAGAGATTTCAGCCAAAATTTAATGAAGCTCAAGAAGAC GCTGAAAGTTATTGGCGGAGAGCGTTACGGAAAGCGGTGATCACGGTTCAGCTTATTAAACGACAGCCAAAGGA AAGCGACTAAGAAAGCCGGCAGATTGCAGGGCTTAATGTTTAAAGGATCATCAATGAGCCTACAAGTGCAGCATTA GCTTATGGCTTGATAAAAAAGAGAGCGAAAAATCATGTTTATGTTGGTGGGGGACCTTTTGATGTTACCGT TTTAAACACAGCGGATAATGTCGTGGAAGTTTAGCCACAGGGCGGATGCGTTTTAGGGGGCGATGATTTTGACA ATCGTGTGATTGTTTTCAGCGAGTGAGTTTAAAGCGAAACGGGCAATGAAATTAACGACGATGATGGCGTTG CAACGCTAAAGAAAGCGGCTGAAACGCTAAAAAGAACTGAGCTCTGCGATGGAGACTGAAATCAATTTGCCCTT TATCACCGGAGCGCTACCGGCGCTAACACACTTGGTTAAAAAAGCTAGGGCTAAATTTGAAAGCTTGACAGAAG ATCTCATGAAAGAAACGATTCTCTAAATGAAAGCGTGATCAAGATGCGGGGCTAACCAAAATGAGATTTCAGAAG TGGTGATGTTGGGAGGCTCTACTCGTATCCCTAAGTCCAAAGAAAGGTGAAAGCGTTTATTATAAAGATTGGAAT AAAAGCGTCAATCCTGATGAG	1290	EAIIANKEGKNTTPSIVAFDKEILVG ESAKRQAVTNPEKTIYSIKRIMGLMFNE DKAKEAEKRLPYKIVDRNGACAIEISGK VYTPQEISAKILMKLKEDAESYLGESVT EAVITVPAYFNDSQLKATKEAGTIAGLN VLRINEPTSAALAYGLDKKESEKIMVY DLGGGTFDVTVLETGDNWVEVLATGG DAFLGGDDFDNRVIDFLASEFKSETGIE IKNDVMALQRLKEAAENAKKELSSAME TEINLPFITADATGPKHLVKKLTRAKFE SLTEDLMKETISKIESVIKDALTKNEIS EWMVGGSTRIPKVQERVKAFINKDLN KSVNPDEVAVGASIQGGVKGDKVDK VLLDVT
HP0452	1291	TAGAAGTTATTGGATTAAAGAGACAAGCATGAACGATTGCAGCAAGAAATCACCGAATTCGAAAGCAAGAATGTGC GCTTGCAAAAGCGTTTGTTGAGTTGAAGGAATACGGCCTAGAGATTAGATTAAAGAAATGGTAGTGTTAAAAA GATGATAGGTTTGGTGGTGGTTTAAAGCGTTTATTGGCTAGAGACAACCCCTTTGAGCCTGAAATCAATCCAAAGAA TTTGCAAGGGGCTTAAATGGGATCTATGATAGTTAATTTAAAGAAATCCATGTGATTGGCCACGAGCGCTAGGAT CTTAAACAATACCGCTCACTTACCAAGATAATTGATGGCTCTATCCATTCTAAGTCGTGGCATTGATAAAGGCAT TGATTGGCATTACCTTTAAACTCTCCCAACACACCCCTTGATCCAGCGGCTTTGAAAAACGCTACCGATCCAAAGA CTTTGATTTTAAATGGCAAGCAACACGATGATTTTGGCTTCCCTTATAAAATTTACGCTCCTTTGTGCTAGTCAAT CCTATAGAATCGTTGACACGCAAGAAAGCGCTTTGGATATTATCAAAACATGGATTAAACCAAGATTTT CTCACATTAAAGTCGGCAGCACAAAGATTATTACCGCATCACGCTCATTTAGACGGGAATACCGCTATCTTTTGG AAGAAAAAACGGGCGTATGAATTAATTAATGAATAAAGCATGCAGCATTTAGTCTTAATCGGTTTATGGGAGC GGTAAAGCTCTTTAGCGCAAGATTGGGCTAGCTTTGAAATTAGAAGTGTGGATACGGATATGATCATTAGCGA GAGGGTGGGCTTGAGCGTGAGGGAGATTTTTGAAGAGCTTGGCGAAGACAATTCAGGATGTTTGAAGAAAAATTTGA TT	1292	EVYLDLRDKHERLQQEITELQSKNVRL QKRLFELKELPRD
HP0452	1293	TCATTGATGGCAAAGAACGCTCTATGGCGGATTGCGTGGCGAATTTGTTGCATAAAAAATTCAGGGATCACG ATAGATATTGGAGGGGTAGCACCGAGTCGCGCTTGATTGAAAAAGGCAAGATTAAAGGACTTAATCTCGCTTGATGT TGGACGATTGCAATTAAAGAAATGTTTAAAGCAAGACTTAGAGGTCAAAATGGCTAAAGCCCTTATCCAAAAAGA AGTCTCTAAACTGCCCTTTAAACACAAAAACGCCCTTTGGGTGGGGGACGATCAGAGCGTTGAGTAAGGTATTG ATGAAACGCTTTTGTACCCCTATTGATCTTTGCTATGCTATGAATAGATGCACATAAAATTTAGCGTTTATTGAAA AAATCGTCATGCTCAAGAAAGATCAATTACGGCTTTTAGGGGTGAATGAAGAGCGTTTGGATAGCATCAGGAGCGGG GCGTTGATTTTATCAGTCGTTTGGAGCATTTAAAAACTTCTTTAATGATCACTAGTGGGTGGGGTGAGAGAAGG CGTGTTTTGGAGCGATTATTGGCGCATCATTAACCATAAATCCCCCAATATCAACCCCTCTCTCATCTCTTTAAAA GATCGCTTTTGGCCCATGAAAGCACAGCCAAAGGTCAAAAAAGATGCGTGAAATTTGTTGAAGCCTTATCGCC TTTGCATAAAATAGATGAAA	1294	IDGQKEALYGGIACANLLHKNSGITIDIG GGSTECALIEKGKIKDLISLDVGTIRIKE MFLDKDLEVKLAKAFIQKEVSKLPFKHK NAFGVGGTIRALSKVLMKRFCYPIDSL HGYEIDAHKNLAFIEKIVMLKEDQLRL GVNEERLDSIRSGALISVVLEHLKTS MITSGVGVREGVFLSDLLRHHYHKFPP NINPSLISLKDRLPHEKHSQKVKECV KLFEALSPLHKIDE

HP0452	1295	CCCTTTAAACCATGCTAAACCACTCAAGCTTGAATGGGTGGAGATTGAGGTTGGAGCATTGGATAAAGTGAT TTATTTAGATCAAGCCCAATAGGCAACCCACAGCAACCTGCCACTTACACGGAGTGATGGATGAAATCA GGATTTTATTTGCCGAGCAAAAGAGCTAAATTTTAGCTATAGTGGAGCCGTTTAGCTTTAATGTTAAAGGAG GGCGGTGCGAGAAATGCCAAGCGATGGGACATTAATAATAGAAATGCACCTTTTGCCCTGATGTGTTAGTCCAATGC GATAGCTGTAAAGGGCGCTAAATACAAACCCCAACCTTTAGAAATCAAGGTGAAGGCAAAATCCATTGCCGATGTGT GAACATGAGCGGTGAAGAGCTTATGAATTTTGTCTAAATCCCTAAATCGCCGTGAAGTTAAACACGCTTATGGA TGTGGCTTAGGCTATATACCTTAGGGCAAAACGCTACGACTTAAAGTGGGGGAGGCTCAAGGATCAAAATTAG CTAAAGAAATTGAGTAAAGACACAGCAACCCCTTATATTTAGATGAGCCTACTACCGGTTGCAATTTGAAG ACGTGAATCATCTTTTACAAGCTTGTGACTTCTTAGTGGCTTAGGCAATCTATGCTAGTATTGAGCATAATTTAGA CATTATCAAAACGCTGACTACATTATAGACATGGGCTGATGGGGGATAAGGGCGGAAAGTCATTGCGGAGC GGCAGCGCTTAGAGGTGGCGCAAAATTCGGAACCAACCCAAAGCTACACGGGAAATTTTAGCTTTGGAAATTGAA ATAGCTTGCAATTTGTTGTAGAAACAATG	1296	LLNHAKKTQSLNGVEIVGLEHLDKVIYL DQAPIGKTPRSNPATYTGVMDEIRLFA EQKEAKILGYSASRFSFNVKGGRCCKC QGDGDIKIEHFLPDVLVQCD:CKGAK YNPQTLKIKVKGKSIADVLNMSVEEAY EFFAKFPKIAVKLKLMDVGLGYITLGG NATTLGGGEAQRIKAKELSKKDTGKT LYLDEPTTGLHFEDVNHLLQVLHSLVA LGNSMLVIEHNLDIKNADYIDMGPDG GDKGGKVIASGTPLEVAQNCEKTSY TGKFLALELK
HP0452	1297	TTGTAGCGATAGCGAGTTTGAAAAAGAGTGCTATCTTACAAGAAATCAAAAAGCGGAGATTTTCAAGCGGT GTTGTCGCGCAGCTTTTATATGAGGTGCTTGGAGGGTTGAGCGGTATTACCATTTAAGCTAACTAATCCTAGCC CCTATATGTTCTATATCAAGACAGCGATTTCATTTTGGGCAAGCCCTGAGAGCGCTTTAAAGTACAACGCTT TAACCAACACGCGTGAAATTTATCCCATTTGCTGGCACCCGTTAAGGGTAAGGACAAACAGGGGAATATTGATTAC GATTTGGATAGTAAATGGAATTTGATTTGCAACACGACTATAAAGAAAGGGCTGAACACATCATGCTAGTGGATTGA GCCAGAAACGACATGGCCAGAGTTTCAAAAACGCTATTGGC	1298	CSDSEFEKRVLSLQEEIKKGEIFQAVLS RSFYMECLEGLSAYYHLKLTNPSYMF YIKSDFILFGASPESALKYNAL TNTAEI YPIAGTRLRGDKQGNIDYDLC SKMEF DLQHDYKERAHEHMLVDLARNDMARV SKKRYC
HP0452	1299	GCAAAAAGACGCTTGCGGGTTTCATCTATGAGATCAGCGAGTTTCATGAAGCCTATACCGCATTGCTAAAAAACA GACCGATACGCTCTATTTATGAGGTATCTCCCTCTAGGTATGGCCAGCATTTAACGACTGCCCTTATGTCAAA TACCTGATTTGACGCTTTGAAAAAGCTTTTGTTGTTTATTTACCAAACTTGATTGCGAGGCGCAGCATCAG CGCATCAAGCAAAACAGTATCAACATTATCAAAAACGTTAAAGCAATAAGAGCGTTGAAACCATCAAGAGAGCTTATA TTGAATAGCATCGACTCTTATAACACCTTTGATCAATACCTCTATACTATGGGATAGCTCTTCTGTTATCATAGCA AATGGTGCGTCTGCTTAGCCCTAGCTAATTTTATGTCAGATGAAGAGAAACCCCATTTTATCGCTATGGATG CCGAAACCCAGTGAGCATATTTTGCACAAACGCCCCAAAGAGGCGAGTCAATGGAACGCGGATTTGACAAAGA AAAAGAGAAGAAATGGTAAATAATATCGGAAATTTAACCTTTTAAAGCGTAAAGAAACGCGCATGCTTAAACGG GGATTTTGATGA AAAAGAAATTTATGGAGCGCAAGACACGAGCAAGTATTAGCTGTTATGACATCACTAAAGA ATTGTATAGCAATTATAGGAAGTGAAGTGAAGTGCCTC	1300	KKDACGFIYEISEFMKAYTALLKQDRY VYLLRYLPSRYWASILTALYVYKPDFD ALKLLVSYYYQTWIAGGTITRIKQTSIN IKNVSKNSKSVETIKELILNSIDS'YNTFDQ YLYNLWDSSVYHSKWVRPVALANY FMADEEKPHFIAMDAETQVEH LPQTP KRGQWNADFDKEKREEWVNNIANLT LLKRKNAHALNGDFDEKRKIYGGKDT SKVISCYDITKELYSNYRKWNEKSL
HP1072	1301	TGGATATAAAGCGCGAAAGCTTAGGCATAGAAGTCAAAAACGTGAGCGCTTATTCTACAGAAATCCGTAGCCAG CACACTTAGCGTGCGCTTGCTTTGTTGGGAGGATCAATGATTACGATCGTTATTGCAAAAGCGGGGAATACAG TCAAAGCGATCTTTTACGCACATTAGCGATATTAATGGGCTTATTAAGGAGTCAATGGGGGTTATTGGTTT AGGACTATCGGTAAAGAGTCGCCAAGCTCGCTCAAGCTTCGGGGCAAGGTGGTGTTATTATCCCTAAAGATA AAAAGAGAGATGAGCGCTTGAGTTTAAAGATCTGCTCGCAACAGCGATATTATCAGCATTCATGCTCCTCTAA ATGAAAGC	1302	DIKSAKALGIEVKNVSAYSTESVAQHTL ACALSLLGRINDYDRYCKSGEYSQSDL FTHISDIKMGLIKGSQWGVIGLGTIGKR VAKLAQAFGAKVYVYSPKDKKIEEYERL SLKDLLATSDIISIHAFLNES
HP1072	1303	GAATTATAAGACACGCGCTGCTGCTTCTTGGACTTCAAAAGAGATGTCATGAATGGTGTATTAGCTTTCAAGCAGCA AAAGTTAAGGAAAC	1304	NYKDTPSHSWTSKEMHELVLAFKQQ KLK
HP1072	1305	TCCTTCAAGCTTACGCCCGCTTAATGGCTAAATCTGCTCGTATCAATCTAAGTTTGTGAGCGCTTTTATCTTTATAC GCAACTCAAAAAGAGCTTAAACCTCTAAAGACACCCCTCTATAAATGTTACATCGCTAGCAAAAACAACGCGCATCCT TTTTTAGTCCCTAATTTGAAAACAATAAAACCAATGATCTGTGCGATTTTGCTTGCCTTATAGCCTGACTCCT AGCCCTTCGCTTTTAAACGTTTTGAAAACATGGTTTTTAGAGCTTTACAAGCAATCCCAAAATATGAGCTTTACT CCCATGATAACGGGATTTTATCTTCCGCGAAAATCTACCAACAAGCTCGCCCTCATGCCACGCTTTCGCCACG CCCCATTTTGTAGAAAACAGCTTTTATGGTGCCATAAAGATGGTTTTTAAACATTATAGTGGTTTCTATCAACGCCC CTATTTCAAGCAACCAATACCCCTACAAACACCTTAATTCATTGATTTTCTTTGGATATTCAATCTATTTTGGTATAA TAGTTATTATGATTATGATTATG	1306	FQAYAPLMAKICSYQSKFVSAYLYTQ LKKEKTSKDTLYKLLHALEKQ RILFLV PNFENNKTKLYLCDFALPYSLTPSPSL NVFENMVFELEYKQFPKYELYSHDNGI FILRENSTNKLALIAHAFPTPHFLEKQLL WCHKHGFNLNIVVSINAPISATNTPYKH LNFDIFSLDIQSILV

HP1072	1307	AGGTGTTCAAGACAGCAAAAGACGCTTGGGGTTCATCTATGAGATCAGCGAGTTCATGAAAGCCTATACCGCA TTGCTAAAAAACAAGACCGATACGCTCTATTATTGAGGTATCTCCCTCTAGGTATGGCCAGCATTTTAAACGACT GCCCTTTATGTCAAATACCTGATTTGACGCTTTGAAAAGCTTTGGTCTTATTATACCAAACCTTGGATTGACG GAGCACGATCAGCGCATCAAGCAACCCAGTATCAACATTTATCAAAAACGTTAAAGCAATAAGAGCGTTGAAACC ATCAAGAGAGCTTATTTGAATAGCATCGACTCTTATAACACCTTTGATCAATACCTCTATACCTTATGGGATAGCTCTT CTGTTATCATAGCAATGGTGGCTCTGCTTAGCCCTAGCTAATTTATTCATGGCAGATGAAGAGAAACCCCAT TTATCGCTATGATGCCGAAACCCAGTGGAGCATATTTGCCACAAACGCCCAAGAGCGAGTCAATGGAACGC GGATTTTGACAAAGAAAGAGAGAAATGGGTAATAATATCGCGAATTTAACCCCTTTAAAGCGTAAAAAGAACGC GCATGCTTTAAACGGGGATTT	1308	VFKDSKKDACGFIYESEFMKAYTALLK KQDRYVYLLRYLPSRYWASILTALYV KYPDFDALKKLLVSYYYQTWAGGTTR IKQTSINIKNVKSNSVETIKELINSIDS YNTFDQYLYNLWDSSSVYHSKWVRPV LALANYFMADEEKPHFIAMDAETQVEH ILPQTPKRGSQWNADFKEKREEWVN NIANLTLLKRKKNHALNGDF
HP1072	1309	GGACCCCTCTTATAACATTTTCGGTTAAAAACAATTTCCACCCCTAAAGAGCGCTAAAGGCAAGGCATAGATTTGG GGAATGGGATAAAAATTTCAAGCTTTTAGAATGGATCGCACGCTACGCCCTTAGTCAATCCAAACGGCTGCATGG TTATTTTGTCTTACAGGTTTAAAGCTATATCGCTGATTTTGAAGAAACGGCTTTGTGGTCAAGAGACTTTATC CAATGGGTTAAAAATAATCCCATGCCAA	1310	DPYNNISVKNFPTLKSARKQGDFGE WDKNFKLLEWIARYAPLVNPNMGCMVIF CSYRFISYIADFLEENGFWVKDFIQWVK NNPMP
HP1072	1311	GAGCGAGTGTGGCGGCTTACTTCTGTAGGCTTAGGGCAGCCCCCTAAACATTCAGTTTCAGCTAATGACAAA CGGATCGAGGATAATTTAGTGAGCGTGATTGAAAAACAGACCAATAAAAAGGTGCGTATTTTAGAAATCAACCTTTA AAATCTAGCCAGGATTTAAAAATGGTCGTTATTGAAGATCGGACACTAAATACAATATCCCGCTTGTGGTGAAG GATGTAATTTAATCATAGGGCTTAGCAACATACTTTAGCAATAAAGCGATGATGCAATTAGTTCAGAAACC AATCAAAAAGTTCAAGCTCTTAACGCCCAACCAAAATAGCGGAAATGAACGCTATTTTAAATGAATACCGGCT GATTATCGGATAGAGTTGCCCTCTACTACGCTGCAATAAGGATAAAATCCTTATATTGCTCTGATCCCATGTGC CCACATTGCCAAAAGAGCTCACTAACTTAGGGATCATTTAAAGAAACACCGTGAGAAATGGTGTGGTGGGGTG GCTTGGGGTCAATTCAGCTAAAAAGCGGCTTATCCAAAGAGAAATGGCGAAAGCTAGGGCTAGGGGAGCGAGC GTGGA	1312	ASVLSALLVGLGAAPKHSVSANDKRM QDNLVSVEIKQTNKKVRILEIKPLKSSQ DLKMVIEDPDTKYNIPLVWSKDNLIIG LSNIFFSNKSDDDVQLVAETNQKVQALN ATQONSAKLNAIFNEIPADYAIELPSTN AANKDKILYVSDPMCPHCQKELTKLR DHLKENTVRMVVVGWLVGVSNAKKAAL IQEEMAKARARGASV
HP1072	1313	ATTTATGCATCACTGCCCTATAATTTGAGTATTGAATATCAAGGAGTGATGATTTAGGGCTTATGATGATTA TTTGAATGGTGTAATAATGGCTTAAAAATTTGTTGGGTAAAGAACAGCGGAGATTGTGCTTGAATGTCCC TTTAGACACGAATAAACATGGCAAGCAAGTTTGGGGCTGATATTATCGCAATAGCTAAAGATGCGGTTGGAAT ACCAAAATACGATTTTGAATGAAAGCAATATTTCAAGACGACCGCTTGGGGAGTTGGTTGCAAGCTAGCGCG CCCTATGCGATCGCTCTGTGGAGTTGATCGTG	1314	LCITSLPYNLSIEYQGSDDFRAYDDYLN WCKNLKNCYFWGKEQARLCLNVPL DTNKHGKQSLGADIATIAKECGWKYQN TIWNESNISRRRTAWGSWLQASAPYAI APVELIV
HP1072	1315	TCAACCCCTTTAAACCATGTCTAAAAAACTCAAAGCTTGAATGGGTGGAGATTGAGGGTTGGAGCATTTGGATAA AGTGATTTATTAGATCAAGCCCTCATAGGCAAAACCCACGAAGCAACCTGCCACTTACACGGGAGTGATGGATG AATCAGGATTTATTGCCGAGCAAAAGCAAGCTAAATTTAGGCTATAGTGCAGCGCTTTAGCTTTAATGTTAA AGGAGGCGGTGCGAGAAATGCCAAGCGATGGGACATTAATAAGAAATGCACTTTTGCCTGATGTGTAGTC CAATGCGATAGCTGTAAAGGCGCTAAATACAAACCCCAACTTTAGAAATCAAGGTGAAGGCAAAATCCATGCCGA TGTTGTAACATGAGCGTGAAGAGGCTTATGAATTTTGTAAATCCCTAAATCGCCGTGAAGTTAAAAACGCT TATGGATGTGGCTTAGGCTATATCACTTTAGGCAAAACGCTACGACTTAAAGTGGGGGAGGCTCAAGGATC AATTAGCTAAGAAATGAGTAAAAAAGACACAGGCAAAACCTTTATATTTAGATGAGCTACTACCGGTTTGCATT TTGAAGAGCTGAATCATCTTTTACAAGTCTTGCAATCTTAGTGCGCTTAGGCAATTCATGCTAGTATTGAGCATAA TTTAGACATTATCAAAAACGCTGACTACATATAGACATGGGGCTGATG	1316	QTLNHAHAKTQSLNGVEIVGLEHLDKI YLDQAPIGKTPRSNPATYTGVMDEIRIL FAEQKEAKILGYSASRFSFNVKGGRC KCQGDGDIEMHFLPDVLVQCDSCKG AKYNPQTLKIKVKGKSIADVLNMSVEE AYEFFAKFPKIAVKLKTMDVGLGYITL GQNAATLSGGEAQRIKAKELSKKDTG KTLYLDEPTTGLHFEDVNHLLQVLHSL VALGNSMLVIEHNLDIKNADYIIDMGPD
HP1072	1317	TGCTTGTGCTCTCTTTGATAAGCGGTGAGTCTCTTAAAAAGCGTAACACTAACGCCAGCTAATCCCCCTT CAGCTAATGGCTTGAAGCCCCCTTTATCCCCCAACCAATTTACCCCTAGAAAGAGCATTCAGCCTCTCCCAAGC CCTCGCTTGAGATAACGATCAGCCGCTATTAGTTCTAACCCCACTAACGCTATCCCTAACACCCCTCTCAC GCCTAATAATGCTATTGAATGAACGCGATGGCGTGGCTCCAGATCCACCATTTACCCCTCTCAAGCCCT GGCTAGCCAAAGCGGCGCTATCGTTGATGGCTACCGCCAGTTGGGTGAATAATGTATGATTAGAGTGAAC GCTCAAGACACCGTCAAGAGACATGTTTTACAAAATTCGTTGATTAAACGAGAGTCAACGCTCTCATTCGTAACGCT GAAATCACTGAGACCATCTATAAGACGGCTTGTGTCAAGTGAAGCTTAATTAGACGGCAGGATTTGGTA TCGTAATTTGAGCGGAGCGAGAGGATAAACCCCTTACTCTATATCATCGGCTATTTAGAAAGTGCTTTTATTA	1318	LVASLLISGCSLFFKKRNTNAQLIPPSAN GLQAPIYPTNTFTPRKSIQPLPSRLEN NDQPVISSNPTNAIPNTPIPTPNNVIELN AWAWAWLQNPFFHPLKPWL

HP1072	1319	TTTTATTGAAGCCCAATGAAGTCGCCAAATACCCGGACAATGAAATCTTAATCGTAACGACCGGCTCACAAGCGGAA CCATGAGCGCGCTTTATCGCATGGCGACTGATGAACACCGTCATATTTCTATCAAAACCCCAACGATTAGTCATCATTT CCGCTAAAGCCATTCTGGCAATGAAGCGAGCTTTCAGCGGTGTTGAATTTCTTGATCAAAAAGAAAGCTAAAGTG GCTTATCAAGAAATTTGACAATATCCATGTGAGCGGCATGCCGCCAAGAGCAAAAGCTCATGTTAAGACTCAT TAAGCCTAAGTTTTCTTACCGGTGATGGGAATATAACCATGTCGCCGCCAACAACCAACCGCTATTTCTTGCG GAGTGCTGAAAAAATATCTATTAAATGGAGGATGGCATCAGGTGAGGTGGCCCTGCGTTTCATCAAAAAGTC GGCAGGATTAAAGCGGGAAGCTATGTGGATAACCAAGCAATTTGAGTATTGATAAAGCAAGCAAGCGCTTTAGAAAGCT AGAAGAGTCGTAGCGCGGGGTGTTGTGGCTAGCATGTTTGTGAATAAACAAGCAAGCGCTTTTAGAAAGCT CTCAATTTCCAGTTTAGGGCTTGTTGAGGTTTCAAGATGAAGGCTTTGATCAAGAAATCAAGGGGCTTAGAG GTGTTATTGAATCCAGCAACGCCGAAATTTGAATAACCCCTAAAGGCTTTGATCAAGAAATCAAGGGGCTTAGAG AAGCGCTCTTTAAAGTTAGAAATACCCGGCTATCATTTGATGCGCCATCTTTTATTGATTGTAACGCTATTGCTT CACAAGTTTTAAAGATGAAGCGCGCTTTTAGAAAGCGTTGGACAATTCAAAACCAACCAAGCTTTAGAAAGCG ATTGTCAAACTCATTTTAAAGCCCAAGAAATGGGGTAAGCTTGATAGTGGGTGAGGTAAGAGCGCTTTAGT GGCGCAAAAATCGTTGC	1320	FIEANEVAKYPDNEILVTTGSQGETMS ALYRMATDEHRHISIKPNDLVII:SAKAIP GNEASVSAVLNFLIKKEAKVAYQEFNDI HVSGHAAQEEQKLMRLIKPKI:FLPVH GEYNHVARHKQTAISCGVPEKNIYLM DGDQVEVGPAFIKKVGTIKSGKSYVDN QSNLSIDTSIVQOREEVASAGVFVATIF VNKNKOALLESSQFSSGLVGFKDEKP LIKEIQGGLEVLKSSNAEILNN ² KKLED HTRNFIRKALFKFRKYPAIICHAHSF
HP0602	1321	CGCTTATTGTAATGCTGCAAACTTTTGTGAAAAAGATGAGAAAAAGCCCTCAATAAATAAGAGTTTGAA GAAAAAGTTAAAGATCGTTTATTATGAGCCCTAATAGAACTATTGATCGTGGTGATAAGCTATTGACCGGT TTTGATGCGCCAAAGCCTCACTTATTATACATTGATAAGAAATGCAAGATCATGGCTTTTCAAGCGGTGTCAGG GTGAATAGACTGGATGGTGAAGATAAGGATTTGGCTGCATCATAGACTATAGCGATTGTTGATAGCCTGCAAGA AGTGACAGCGGATTACACCAATAAAGCGTTTGAACCTATGAAGAGAAAGACATTCAGGGCTTATTCTGACAAAGC CCAAAGATTAGAAAAAATTAGAAAGAGTAGAGATCAGTTAAGATCGCTGGTGAAAGCGTGAAAGAGCCAAAG ATGAATGGATTATATCGCTTATTTTGGCGGAATGATTTAGAAAAACGCTCAAAAAGCGGTTGTTTACCAAGC TTGTTGGCGGTTTTTAAGAAATGTTGTGGAATGAACCAATTTAGAAAAAGCCGTTTATTCTAAAGAAAGAAATGCAAC AATCAAAACAAGAGCGGAATTTATAGGCATTTACAAAAGTGTTAGCTTAAGCAGTGGGG	1322	AYCKMLQNFDEKDEKALNKEFEE KVKDRFINEPNRMKLLVVDKLI.TGFDA PSLTLYIDKKMQDHDGLFQAVCRVNRL DGEDKDFGCIIDYSDLFDSLQEVHSDY TNKAFENYEREDIQGLISDKACKIKKL EEARDQLRSLGESVKEPKDENIDYIAYF CGNDLEKNAQRRLLFYQLVGAFLRMF VELNHLEKPVYSKEEMQQIKQEAIFYR HLQKVVSLSGG
HP0608	1323	CAGCGGTGTAGCGACAGTGGATGGCAGACCTATCACTAAAGCGATTTGACATGATTAAAGCAACGAAATCCTAAT TTTGATTTGACAAGCTTAAAGAGAGAAAGAAAGCCCTTATTGATCAAGCTATTGACCGCCCTGTAGAAAT GAAGCTAAACCGAGAAATGGACAGCACTCCAGAAATTAAGCGATGATGGAAGCGGTTAAAAAACAGGCTTTAGT GGAATTTGGCTAAAAACAGGCTGAAGAGTGAAGAAAGTCCAAATCCAGAAAAAGAAATGCAAGATTTTACAA CGCTAACAAAGATCAGCTTTTGTCAAGCAAGAGCCCATGCTAGGCATATTAGTGAAAAACCGAAGATGAGGCTA AACGGATTATTTCTGAGATTGACAAACAGCCAAAGGCTAAAGAAAGCTAAATTCATTGAGTAGCCAAATCGGGATA CGATTGATCCTAACAGCAAGACCGCAAAATGGCGGTGATTGGGAAATTCCAAAGAACCAATGGCTCCGGA TTTTCTAAAGCGCTTCGCTTAACTCCTGGGATTACACTAAACCCCTGTTAAACAGAGTTTGGTTATCATATT ATCTATTGATTTCTAAAGATAGCCCTGTAACTTATCTATGAACAGGCTAAACCTACCATTAAGGGGATGTTACAAG AAAAGCTTTTCCAAAGACGCATGAATCAACGCATTGAGGAACCTAAGAAAGCAGCTAAATTTGTTATCAACAAGTAAT TGATGAGGTGTTATCATGTTAGTTAAAGGCAATGAATTTTAAAGCCCATAAAGAGGTTATG	1324	GVLATVDGRPTKSDFMIKQFNPNFD FDKLKEKEALIDQAIRTALVE:NEAKT EKLDSTPEFKAMMEAVKKQALVEFWA KKQAEVKKVQIPEKEMQDFYNANKD QLFVKQEAHARHILVKTEDEAKRISEID KQPKAKKEAKFIELANRDTIDPNSKNA QNGGDLGKFQKNQMAPDFSKAAALT PGDYTKTPVKTEFGYHIYLSKDSPT YTTEQAKPTIKGMLQEKLFQEI:RMNQR EELRKHAKIVINK
HP0608	1325	TGCGTTGAGGCTTCAACCGGAATGCCACTCGTGGCTCAAGCGGATGTAATTTCTTAAGACACCCCATACAT GGGATTTTAAAGCGCTCGCGCTCGCTCCCTGCGAATTTAGAAAGCTTACACCGAAACCGTTCCGCGGTTCAATTT GGCTGAATGCTCATGACTCCTGTATTCTTGTCTCATGGATGAACCGTGGGCATATGATGGCAAGGTGCAAAATCC CAGATTTAGAAAGAGTGCAAAAGATGACTATTATCTGTAAGGAATTTCTGGCGGATAAAAAGACTACAAGCCTTATG GGTCCGACAAAGACGCGGCTGT	1326	RSRSTGMPTRVAQGDVNF:RHPHIG DFKAVALAPANLEEAYTETVRAFNLA MLMTPVFLMDET:VGHMYGK/VQIPDL EEVQKMTINRKEFLGDKKDYKPYGVA QDEPA

HP0608	1327	TGAAACCTTTAGCGCTCTTTAGGTAAAGCCCTTTGAGGAGTTTGAATTTAGAGGTTTAAACAGCTTTCTAA TGCGGCTTGAGCGGTAAACAGCCCTATGAATTTAGATGGCTTAGAATGAACGAGTGGCTTTAAACATGCGAGAC CATTTCCCTAGCATGATTTATAGATAAATCCACGCTATTTGATGCAATTAATCCCTGAGTTTGATAATATCCGCT TATTGGATAGCTCAAAACCGCTTTGGGCGTATTTAGGAGCTGAGGTTATACCCAAATGCCCTGGGCTAGTTAT GTGAATTTAACGCAAGGCTATGGAGTGTGCATGAATGAGGGGCTATTTCTCATCGGTGGTGGTGGAGCAG GCACTGATTTGGTGGGAGCGAGCGTGTAGGCGTTTAAAGTGGAGGGAATAACAACCCCATTAGCATCGGAA AAATTTGTTGCTAGGGCTAATAGCGTTACTGGAATAGTCTAGCGGATGGCTGTATCGTGGATGCGGCTTGCGA TACTAGCGGGAGCGGTAGAAATGAAGAAATGAGTTTAAAGCTTTTAAAGTGAATGAGCTTGTAGAAAC ATGCCAACACCTTTACAAAGGCAAGAACTTTCCGGAATAATGGCGTGCAATTTGTTCCCAATAGTCAGAAATGGCA AGCTGATTGCTTTAGGAGCGTGAAAAAATGAGTTGAATCAAAACCTGCATTAAGGATTAAGAAATGCTCAAAA AAGTTGTATTG	1328	KLLALSIGKAPLRSNLGIFNQLSNAA WSGNKPYELEWLRMNEVALKMRDHF PSIDFIDKFPRLMQLIPEFDNIRLLDSS KTRFGAYLGTGGYTQMPGASYVNFNA GAMGVMNEGRISSVWVGAGTDIGG GASVLGVLGGNNNPISIGKNCLLGN SVTGISLGDGCVDAVAILAGSVIEIE NEFKLLEVNSALEKHANNLYKGKELS GKNGVHFRSNSQNGKLIAFRSVKKIEL NQNLH
HP0608	1329	CAATCCCTTGCCCTTATGAAACAACAAGAAAGAAAGAAATCCTAATCATAGGCTCTGGCCTAATCG CATCGGTCAAGGCATTGAATTTGATTGTTGGTGCATCGAGCCTTGCTTTAAAGATTTAAACATTAAGCGGT CATGTTCAATTGCAATCCAGAACTGTAGCACGGATTATGATACCGACACGCTCTATTTGAACCCATTTCATTT TGAGTGGGTGAAAGCATCATCAAGGAGCGAGTGATGGCATTATCGTGCAATTTGGGGACAAACCCCTTTA AACTCGCTAAAGATTGGCTAAATGCAAGCCCTTATTGGCAGCCTTTTAAAGTGATGATATTGCAGAAAGAC AGGGAATAATTTCCCTCTTTTAAAGAGCTTGACATCAAGCAGCCAAACCGCATGGCTAAGAGCGTTGATGA AGCTTAGCATCGCTAATGTGATTGGTTCCCTATCATTTGCGCCCTAGTTATGCTAGCGGGCCCAACACATGC AAATTTAGAAACATGAGGAATTGCGCCATTATTTGGAAGCGTTACGCATGCTTTAGAGATTAGTCTCAAAACC CGCTTCTATTGATAAGTTTGTAGAAAGCGGTGGAATAGATGTGATGCTATTTGCGATAAAAGAGGTTTATA TTGCCGGCATTTACAGCACATTGAAGAGCGGGAATCCATTAGCGGCTGCTTATCCCTTCCACTCTA AGCCCTGAAATTTAGATGAATTTAGCGGGGTGAGCGCAAAATCGCTGCAATTTGGCGGTAGTAGGGCTGTTGAA TATCCAAATTTGCTGTGCATCAAAATTCGCTGATTGTTGATTGAAGTCAATCCAGAGCCGCGGAACCGTCTTTT AAGCAAGGCTTTAGCGGCTTCTTTAGCCAAAGTGGCGACTAGGTTATGGTCTAGAAAGACTTGAAGAAAGCCTTGA AGTTTATGATAAAAA	1330	NPLPIENKQEKKEKKILIGSGPNRIGQ GIEFDYCCVHASLALKOLNIKSVMFNC NPETVSTDYDTSDTLYFEPHFECVKSII QRERVDGIIVHFGGQTPLKLAKDLAKM QAPIGTGPKVIDIAEDREKFSFLKELDI KQPKNGMAKSVDEAYSIANVIGFPIVR PSYVLGGQHMQILENIEELRHYLESVT HALEISPKNPLIDKFEKAVELDVDAIC DKKEYIAGILOHIEEAGIHSAGDSACFIP STLSPEILDEIERVSAKIALHLGVVGLN IQFAVHQNLSLYIEVNPRASTRTPFLSK ALGVPLAKVATRMVLEDLKEALKFYD KKNIVGYSKGVYKPKMPHFVALKEAVF PFNKLYGSDLILGPEMKSTGEVMGIAR SLGLAFFKAQTACFNPIKNKGLIFVSIKD KDKEEACVLMKRLVQLGFELCATEGT HKALEKAGVKSLKVLKISEGRPNIMDL MMNGEISMAINTSDHKSQDDAKLIRAS VLKNHVSYFTTLSTIEVLLALEESKE DELLALQDYLK
HP0232	1331	CCATGAAAAAGCGATAAAGCCGCTTTGGGCTTTATGAATGCTAAAGGGGTACCACTAATCTTAGTTGCAAG CGCAAGAACTCAGTGTCAAGCAAGCGATGAAAAACCAACCATCGCCAAAGCGATGTTTGGCCACCTTGAACGCG AGTTATAATTTTAAAAATGAAGCTAGGATACCTCAGATAAAGCATTATAACACCCCAACACTCCAAGCTCAAGTCA CATTGAATGTGTTAATGGCTTAGCGATGTGAATAATGTCAAGGAAAGCTGCGACTTACCGCTCCAATGTGGCTA ATTTAGAAATAGCCGCGCAGAGCGTGTATTTGCAAGTGGTCAACAAATACTACGAGTATTTAACAATCTCGCTCGCA TGATCGCTTTGCAAAAAAATTAGAGCAATCAAAACGGACATTAAGGGTTACCAAGCTCTATGACAAAGGGCTGA CCACGATTGATGATTGCAAAAGCTTAAAGCGCAAGGGAATTTAGCGGAATACGATATTTTGACATGCAATTTGCTT TGAGCAAAACCGCTTGACTTTAGATAACCTTACCAATCTAGTGTGAAAAATTTGAAAAAGACCAAGATTGATGGC CTAATTTGCAATTAAGAGAAAGCGAGGATGTGTTGACTCATGGCTTTTGGATCCAAACCCGCTTATGCCACAGGC AACTCAATTAATACCCCAAGATAGATGTGTTGACTCATGGCTTTTGGATCCAAACCCGCTTATGCCACAGGC GTTTTGGGAATTTCTACCCGCTCAGCAAAATACGGCTGGGTTACTGCGACTTTGAATATTTTGTATGATATAGGCT TGAGCTTGCAAAACCAATCCATCATGCTAGGCCAATTAGCGAATGAAAGAAATTTAGCGTATAAAAGCTAGAGCAAG AAAAAGACGAACAGCTTTACAGAAATCGCTTGATATTGCCAGAGCCCAAGATTGAATCTTCAAGGCTAGTTGGATG CGGCCAATCTT	1332	HEKSDKAALGLYELLKGATTNLSLQAQ ELSVQAMKNHTIAKAMFLPTLNASYN FKNEARDTPEYKHYNTQQLQAQVTLN VFNGFSDVNVNVEKSAITYRSNVANLE YSRQSVYLQVWQYQYEFNNLARMIAL QKKLEQIKTDIKRVTKLYDKGLTTIDBL QSLKAQNLSEYDILDMQFALEQNRLT LEYLTNLSVKNLKTITDAPNLQLRERQ DLVSLREQISAIRYQNKQLNYYPKIDVF DSWLFWIQKPAYATGRFGNFYPGQON TAGVTATLNFDDIGLSLQKQSIMLGQL ANEKNLAYKLEQEKDEQLYRKSLDIA RAKIESSKASLDAANLSFANIKRKYDAN LVDFTTYLRGLTTRFDAEVAYNLALNW YEVQKANYIFNSGHKIDDYVH

HP0849	1333	GGTAAGACTTTCGGCTGAAACGGACGCTGAAGTGAGCGAAGCCATTGACITTTTTAGAGTTTTACCCTTACAGCTTAAG GGTGTTGCAAGAGCAAAACACAAAAACGCAATTCACCCCTAAAGCGCTGGCGTGGTCAATTCGCCCATGGAATTTTC CCTGTGGGCATTTCTGTAGGCATCTCGCTGCCCTTACCTAGCTACGGCAATCGGTGATTTACAAGCCCTCAAGTTT GTCTAGCGTAACGGCTATAAGCTTTGTAGTGTCTTTGGGATGCGGGCTGCTAGAGATGCGCTCATTTACTTTGCG CCTCTAAAGGGAGCGGATATTACGGAACATCTTTAAGAGATGAAAGCATCCAGTTTGCCATTTTAAACGGGGCGGAA GACACCGCTTATAAAATGTTAAAGCTAACCCACTTTAGCCTTAGCGCTGAAACAGCGGTAAACACGCCACCAT TGTGAGCAAAATGGCAGACAGAGACGAGCGGATTAAGAAATGTTATCCATTGAGCTTTTAGCAATTCGGGGCAAAAT GCTCCGCCACTTCGCTTTTAGTATTAGAAAAAGAAAGTCTATGAAGATGAGAACTTTAAAGAGACTCTAATAGATGCGA CTCTAAGCCTTAGCGTGGC	1334	GKTFaETDAEVSEaIDfLEfYpYSLRVL QEONTKTQfTPKGVGVVIApWNfPVGi SVGTIApLATGNrVIYKpSSLSsVTGY KLCECFWDAGVPRDALIYLpSKGSDIS EHLlRDESiQfAILTGGEDTAYKMLKAN PTLALSaETGGKNaTIVSKMaDRDQAI KNVHSaFSNSGQKCSaTSLlVLEKEV YEDENfKKTlDlATLSlSVG
HP0849	1335	GGTGACGATGCGGCTTGTGAGCTTGTAGGCTGTCAGGCCAGAAAGGCATTTCAACAACAATGGGGGCATCAAAAAACACCAC ACCAAGATGAGTATCCCTAAAGCCCTGATGATTTCAAACCTTTTATCAAAAAATCCATAGAGATTTTAAACCAAGAA ATCTCGTGCCGTAGAGCATAAATCTATAATGGGAGAAAGCCTTAGAAATGCCTAACACCCCTTAAAGCCCAATGAA ATGCGTTTGCACTGCGCAAAAGAGCGGATTAAGCGCTCGCATCGCCTGATGAAGCTTTTCGCTCAAAATTTCAAGCATCGCA TTTGTGGTGAGTCAAGATTTAAGCGCTCGCATCGCCTGATGAAGCTTTTCGCTCAAAATTTCAAGCATCGCAA CAAGAGTTGCTCTTCTACAACGCCGAAACCGCCTTGCAAGAGAACTTGATGAGTTGAAAAAACACCACATCAGCGC CCATGCAAGGCCCTCTAGGGAGCGTTTGGACACCGCTATGAATCCTAATAGCGTGCTTGATAGACAATCTCAAC GAAGCCAAAGAGTTGCACGACAAAATAGGGGTGGAAAAATTAAGATCGTTTTAGAAAAAGCCACAGACAACGAGCA GTATTGCATCATCTTTGCCAGCAGCT	1336	GDDAACELVRPEGfNfNNGGHQKHHT KMSIPKaPDDfKfPKfIKHfRDNfQNRNLV PVEHKIYNGEKPLEMPNTl.KANEMRLH LGKEADYEQKDLMVGFENSESHLLVV SQDLSARIALMKLFAQNfKfTANKELLFY NAEKRLARELDELKfKHHTPMQGPLGS VLDTAMNPNSVLVIDNLNfAKELHDKIG VEKLRSfLEKATDNEQYCIIfAHD
HP0849	1337	AAAGAACTGAGCTCTCGGATGGAGACTGAATCAATTTGCCCTTTATCACCGCGGACGCTACCGGGCC	1338	KELSSAMETEINLPfITADATG
HP0849	1339	AGAGCCAAACGCTTTAAAGACTACCTTAAGCCTGAAGAAATTAAGGCTCTATACCTTAATTTACAAACGCTTTTTAGCT TCTCAAATGCAAGACGCTCTTTTGAAGCCAAAGCGTGTGTGCTTGCAGAAAAAGCGGAGTTTAAAGCGAGTGG GAGAAAGCTCCTTTTGTGCTATTATAAAATTTTAGGCAATGACGATAAGGACAAATGCTCCTCCCAATTTGAAAGA AAATGACCCCATTAATTAAGAAAACTAGAGAGCAACGCCCATGTTACAGAACTCCAGCACGCTATTCTGAAGCGGA GCTTGATTAAGTTTTAGAAAGTTTAGGCATAGGCAAGCGCCAGCACCTACGCCCAACGATTTCCCTTTTACAAAACA GAGACTACATCAAGGTAGAAAAAGCAAAATCAGTGCTTTAGAGAGCGCTTTTAAGGTAGTAGAAATTTTAGAAAGCG ATTTTGAAGAAATCGTGGAATCCAATTCAGCGCTTCTTAGAAGAAAGAAATGGACAATATCGCTCAAAATAAAGCCG ACTACCAGCAAGCTTTAAAGGACTTTTACTACCCCTTTATGGATAAAATGAAGCTGGGAAAAAGAATATCATCTCTC AAAAAGTGATGAAAAACCGGTCAATCATGCCCTAAATGCGGTGGGAATTAGTCAAAAAAATAGCCGTTATGGG GAGTTATCGCTTGCAACAATTACCTAAATGCAAAATATGTCAACAAACTGAAAGCGCTAATGATGAAGCCGATCAA GAATGTGCGAAAAATCGGAGGGGAAATGGTGCAAAATTCAGCAGAAACGGGCGCTTTTAGCTTGCAACAATTA CCCTGAATGCAAAACACCAAATCGTTAAAAACA	1340	EPNaLKDYlKPEELRlYlYKfRfLASQ MQDALFESQSVVAACEKfEFKASGRK LLFDGYyKILGNDDKDKllPNLKENDPI KLEKLESNaHVTEPPaRYSEASLIKVL SLGIGRPSTYAPTISlLQNfDYIKVEKK QISALESaFKVIElEKHfEEIVDSKfSA SLEEELDNIAQNaKYQVlKDFYYPf MDKIEAGKNIISQVlHEKTGQSCPKC GGELVKKNSRYGEfIACNNYPKCYVK QTESANDEADQELCEKCGGEMVQKfS RNGaFLACNNYPECKNTKfSLKN
HP0849	1341	GCTAACCGAGCATCATATCCCTTTTGATTATGCTAAAGATTTGATTTTGACAACAAGCCTTTAACAAAGACACCAAAACG CCCTCATTTCTAAAGCTTTTAACTCTAAAAATGAGGTTTAAAGAAAGAGACTTACTATTCTGTGGTGAGGGTTTGT CTATACTGAAAAAGAAATTAGACAACCTTGTCTGAAGAGGATGGGAATGAAAGTATTCCTATGATTTTCAAGCGCTAA GGAGTTGCTAGAAATTGTGCAAAACACCAAAAGCATCGCTGAAATCGTGCTTTGAGAGAAAAACGCCCTGAAAA ACCACCTTGATGCAACGATGGTTAAATTTATCATGCGATGCTTGAGTGTATGATAATGGGCTAATTTCTAAAGAAA GGTATCTGCTGTTCTTTGAAAGTAACACGATTTGGCCCCAAGCATTAAACCGCGCTAGAAAAAACACCCACAAAGC GGGAAAGACCCCTTAGCCTTAGCTGATTACATTTGCTTTACGCTCGGCCATTGCTGAAGAAAAACGCTAGCGGAGG CAAGGTGTAACGCCCTCAATATGGGCGTGCGCGGTGGTCCAAGCG	1342	ANQHfIPfDYAKDLfDNKPlTRHQNa LlLKAFNSKNEVLKEETyYSVGgGFVY TEKELDNlSEEDGNESIAfDFSSAKELL ELCQKHQKSIAEVRLRENALKNHPDA TMVKIYHAMLECYDNGANSKERYLPg SLKVTRLAPSIKTRLEKHPTSGKDPLAL IDYISLYARAIAEENASGGKfVVfTAPTNG ACAVfPS
HP0849	1343	TGGCGTTGGCAGCAAGCCCTGATTAATCAAGCGCTGGATAGAGAAGATGGCGAGATTTGGGCGAGGGGATCA AGGGCTTATGTTGTGTTATGCATGCAAGAGACTGAAACCGCTCATGCCCTTACCCATTCAATTTAGCGCACCGAGCTCA CTTTCGCTCTGGCTCAAAAAAGAAAAAGACAACACTCTGCCCTTTTAAAGCCCTGATGGCAAGTCTCAAGTGAGCGTG CGTTATGAAAAACAACAGCCTGTAAGCATTGATACGATTGTCAATTTCCACCCCAACTTCCCGAGAAAGTTTCACAAAAA CATTTAAAGAAAGCTGTGATTGAAGAGATCGTGATAAGGTTTTATCCAAGAAATATTGCGATGACAAATATCAAGTTT TTGTCAATCTACAGGAAAAATTCGTTATCGGTGGGCCCGCAAGCGGATCGGGCTTGACGGGCGAGAAAAATCATCGT	1344	GVGEQSPDINQGVDRDfGEIGAGDQg LMfGYACKETETLMPlPIHLAHQlTFAL AQKRKDNTLPfLRPDGKfQVSVRYEN NKPVSiDfTIVISfQHSPEVfSQKHLKEAVI EEIVfKVLfSKEYLHDNIKfI=fVNPTGKfVI GGPQGDAGLTGRKI

HP0849	1345	GCCCCCTTTTAGCGGTCAATTGAAGGCATAGGCCAAGGATTGCCCTAGCATTAAGATAAAATCAACCGCTTAGCGAAAGAACGCCACAGCTGTTTATAGAGCTCAACCATCCATAAAGCGAATATTATATCAACGGCTTAAGCACCTTTGCCCCCTAGATGTCAAGAAAGGTATCCATTCTATCAAGGCTTAGAAACCGCTCATCACGGCTATGGCTATCGGATAGATGATTTATCCAGCCACGGAATTGACCCACACITTAGAACCAAAATCAAAAGGCCTTTATGGCCGGCAATCAATGGGACTACCGGCTATGAAGAGCGGGCTCAAGGGCTTAGGCTGGGATTAATGCGGTATTAGCCCTAAAGAAATCAAGCCCCCTTTATTTAAGCGCAATGAAGCTTATCGGCTTTGATTGATGATTAATCACTAAGGCACGAATGAACCTTACAGAAATGTTTACAGCGGAGCGCAATACCGCTTGCTTTAAGAGAAGACAACACGCTTTTAGATTAGCGGAACATGCCTATCGTTAGGGCTTAGGAAGAGGATTTTATAAGGAATT	1346	APLFSGQIEGIGPRYCPYSIEDKINRFSE KERHQLFLEPQTHKSEYINGLSTSLP LDVQEKVHSIKGLENALITRYGYAIEYD FIQPTLHTLTETKKIKGLYLAGQINGTT GYEEAAAQGLMAGINAVLALKNQAPFI LKRNEAYIGVLIDDLITKGTNEPYRMFT SRAEYRLLREDNTLFRLGEHAYRLGL MEEDFYKE
HP0849	1347	CACCCGGCGGTGTTTGAAGAAATAGGCATTAAGCAATATAGGGCTTAAATGGGCATGATTGAGCGCGATTAT TGAAACCTTAATAATTAGCCAAAGAGCTTAAAGAGCGGCTGCTAATCCATGCGCAAGCTTAAAGGGCAAGGCTATA AGATCGCTGAAGGGCGCTATGAAAATGGCATGGGTGGGCTTTTATGATTGGATACCGGCTTGCTCTAAAAATCC AAAAGCGCAATCTTATGCGCCACTGAAGCGTATCTAACACCTTTTAGAATTAGCTAAAGATGAAGAAATCGTA GGCGTAACCGCGGATGCTAGCGGCACAGGATTAGACAACTCATTGACGCTTACCTTTGCGCTTTTGTGATGT CGCTATCGCTGAGCAACACGCTTAACTTCTAGCAGCGCTATGGCTAAGAGGGTTAAACCTTTTGTGAGCATCT ATTCTACTTTTTCAGAGGGCTTATGATTCTATTGTGCATGACGCTTGTATTCTAGCTTGCCGATTAAATTAGCCAT TGACAGGGCTGGGATTGTGGCGAAGATGGCGAGACGACCAAGGGCTTTAGACGCTGCTGATTGCGCTCTATC CCTAACATGGTCATTTTGGCCACGAGACATGAGACTTTAAAAACGCGCTGCTTTGCGCAATGAACACGATT	1348	TPGVFFEEELGINYIGPINGHDLIAIETL KLAKELKEPVLIAQTLLKGKGYKIAEGR YEKWHGVGPFDLDTGLSKSKSAILSP TEAYSNLLELAKKDEKIVGVTAAMPS GTGLDKLIDAYPLRFFDVAIEQHALTS SSAMAKEGFKPFVSIYSTFLQRAYDSIV HDACISSLPKLAIDRAGIVGEDGETHQ GLLDVSYLRSIPNMVIFAPRDNETLKNA VRFANEHD
HP0849	1349	GGCATGCTGTGATTAGGGCAGTGATGGGTGCTTAAAGCTATCAAGAGCTGAAGAAATCGCTGATAAAATCGG CTACCTGTCTATTAAGCAGCGCTGGTGGGGCGGAGAGGCGTGGTGTCTAGGAGATAAATCCAAGCTT AAAACCTTTATAGCGCAGAAACGGAAGCTTGAAGCGCTTGGCGATGGAGCGTGTATTAGAAAAGTTTCA CAACAAGCCCAAGCATTGAAGTCCAAATCTAGCCGATAAGCATGGCAATGTCATTGATGGCGGAAAGGATT GCTCGGTGCAAGAGCGCCAAACAAAGCTCATTGAAGAAACCCCGGAGTGTGTTAGAGAGGGCGTGGTGAGC GTTTGTAGAAACAGCGATCAAGCGGCTAATAATATCGGCTATGTGGGGCGGAGCTTTGAATTTTGTGAT TCTAACATGAAGATTTTATTCATGGAGATGAACACTCGTTTGAAGTGAACACACCATAGCGAAATGGTGAGC GGGTTAAACCTCATTGAGTGGATGATTAAATCGCTCAAGCGGCAAAATGCCCCAAGCAAGAAAGCTTTCTCTCAAA GGGCATGCGATAGATGCCGAATCAGCGCAGAAATCCTAAAT	1350	GMPVIEGSDGLLKSYQEAEEIADKIGYP VIAKAAAGGGGGRMRVWGDKSKLNLY LAAETEALSAFGDGSVYLEKFINKPKHI EVQILADKHGNIHVGERDCSVQRRQ QKLIETPAVLEEGVRELERLETAIAAA KYIGYVAGTFFELDSNMKDFYFEMEM NTRLQVEHTISEMVSGNLIEWMIKIAQ GEKLPKQESFSLKGHAIECRITAEADPK
HP0849	1351	AGGAACGCAAACTAAAGAGAAAGTCAATACCCACCCCAAAATCTATGAAAACCCCTAACCCACCCCAAACTAAAG AACAGCCTAAAGAACAAATAAAGCGATACGGCCACCCCAAAAGCGCTTACGGAAATACTACATACCCCAAGC ACCATTTAAAAATGCAACGGCTTATTCACCACGGACAAGATAGAAATGGCTTAACTTTTATCTCAAAACCCCTG TGTATGCGAATATGTTAATGGAGCGTAACCATACAAACTTTCTGCTTATAATTTAAACAATGTTGAACCTGAGTTT TAAAGACGCTCAAGGCAAGGTGGTCAATTTAGGGGTATAGAGACCATCCCTAAACAATCTCAATTTACCTTGCCTG CAAGCTTGTAAATGATTGAGAAATTTGAACAAGCTGATAGCTTTAATACCAACAATTTCAAGCCACTGCCACACAAT TTCTGACGCTAACACGCAAGTTTGTTCAAAAGCTCAGCAAGATCACAACCAATGTAAACAATGAGTTATGAAAACGC CGATACCAACAATTTTAAAGGTAATTTGCCATGATTGTGTGTCAGATTTACCCCAAAACCGCAGAAATGACCAA TTTAAATGCTAGATGATTGCGGTGTTGACTCTAAATCGTGGGAAGAGCGGTTTAAACGCTCTTCCAAATTTCT AACAGCTCATCAGAGTGGGCTGCTGACTTCTCCTAAGTGGTGAATCCTTCAATAACGGGCTGCTGCTCCCATCTA TGAAAATACTGCTAACCCCAACATCCGTTATAGATGCGTTTAGAAGAACGATCAATCTTGAAGTGAATATCTAA ATCAGGGTTTGTAGGGCTAGGGTATGAACCTTATGATGATAATGATGGTAACTCTGGGATAGAAAGCTTCTGCTTAAATC CTGAAAATTTGTTGTAACAACTTTGAACAAAGTTGATATTGTGGAATTAAGAGACATTATCCATGAATTTAGCCACAC TAAAGGCTAT	1352	GTQKEEVITTKIYENPLTHPQKEQP KEQNKSDTATPQSAAYGYIPQSTLK NATALFTTDKIENGLTFYSQNPVYANM VNGSVTIQNFPLPYNLNNVELSFKDAQG KVNLGVETIPKQSQITLPAFLFNDSEF EQADSFNYQQLQATATQFSDANTQSL FQKLSKITTNVTMSYENADTNFKGNC HDCVSDFTPTQAEELTNLMLDMIAVFD SKSWEEAVLNAPFQFSNSESSECGSDF PKCVNPFNNGRVAPIEYVLTQSVI DAFRRTINLEVNILKSGFVGLGYELDDN DGNLIEASALNPEKLFGLTKLVKVDIVE LRDIHEFSHTKGYTHNGNMTYQVRVL CQENGGAIECEGEGKEELY

HP0849	1353	AGAGCTAGAAAAAGTGCATCAAAATTTAGATAACGCTAAATCTTTGTGCCTAAATGCAATTGCATAAAGCTTTTAGAG GAATGTTTAAATGTTATGATTTTTTAAACAACTCATCGCTAAAGAGAGCCATGGTTTTGCACAAAAACAACGAAT CAGAAAACTAGAACCTTATTGAGTTTGATCGCAACGCGCTTTTGCAATCAAGCTTTTGCTCTATGCGTTTCATGC CAAGAGCGCTGTGAATTTAGCGAATGCTTTCAACACAGAAATCAGCCCGATAATTACGAACGCTTTTTTAAAGCTA AAAAATTACAAGATATGATTTTACAAGACACCGAGCTTTATTTCCAAATGGAGAAATTTGAAAGACGGAAGAAAG CGGGAGAGCCTCACCAGAAAAACGAAAAAGAAAAAGGACGCAAGAAAAAGCCCACTAAACAAAGAAAA CTATATCGGCATTGAGGATTTCAAAAAAGTAGAGATCAAAAGTGGGCTTATCAAAAGAAAGCTCAAAAGGATTGAAAAATC CAATAAATTACTGGCTTAAAGTGGATTTAGCGGAAGCGCTTTGAGGCAGATTATTTAGGGATCGCTTTGGATT TGAGCCTGAAAGCTTGGTGGTCAAAATGGTGGCT	1354	ELEKVHQILDNANSFVPKMQLHKALEE LFNVYDFLNKLIAKEEPWVLHKNNESE KLEALLSIANALLQSSFLLYAFMPKSA VKLANAFANTEITPDNYEIRFFKAKKLQD MILQDTEPLFSKMEKIEKTEKAGEASPE KNEKEKDAKEKAPLKQENYIGIEDFK KVEIKVGLIKEAQRIEKSINKLLRLKVDL GEGRLRQIISGIALDYEFESLVGQMVC
HP0849	1355	AAGGGAATTAGAGGGAATTTAGCCCAAAAGAGAACGCGAGAACAAAAATATAACACTCTTTTCAGTCAAAAAATAAGCA ATTAGAAGCTGAGTTAGATATGCTTAACGAAAAATTTGAAAACTGAAAAATATGTATGCTGGGTAGAGGATTTTGA AAAAAGCCAAAAAATATCAAGAACAAATTTGTAAAAACCAACCCCAAGTCTTAGGCGCACCTTCAAAACGAAGTGA AGAAATTAGCGTTCTTAGAGCGTATAGAAAAAGGCGATGCAAGAGTTCAATGTTTTCTATCCCAAGCGTTTATTGTATAT GTTCCACACCGCTTTAAAAAGCACGCTCTATCGCCATTGAGCGTCTAAGTGGGTGAGTGGGACAGGAAAAATCT GAACTGCCCAAGCTCTATGTGCATTTTGGGGGTTAAATTTTAAAGCATTTGCTGTCAGCCTACTTGGGATAGCCC AGAACTGTTGATGGGTATTTTCATGCGATAGAAAAAAATTTGATGCGACAGAGTTTTACGCTTTTTTATCCAGAC CACTTTGAGCAATAATGAAGAACCATACGGCTTAAAGAACGCGATGAGTATTGTGTTGCTTGATGAAATGAATCTAGC CCACATTGAATTTGATTTTGAGAAATTTTGAGCAAGCTAGAGATTAAAGTGCAGTCAAGAACTAATATCAGCATTA CTAGGCACCGGCTTAAC	1356	RELEGILAQKENAEQKYNTLSVKNKQL EAELDMLNEKFEKLNMYAGVEDFEK RQKNIKEQIVKTNPKVLGAPSNEVEEL AFLERIEKGMEFNVPYKRLLYMFHT ALKSTLSPLSVLSGVSGTGKSELPLK YVHFGGLNFLSIAVQPTWDSPELMG YFHAENKFDATEFLRFFIQTTLNNEE PYGLKEAMSVILLDEMNL'AHIELYFAEF LSKLEIKCSQETNISIKLGTGLT
HP0849	1357	AACCCCTAAACCTAAACCAACCAAGAGAAATACGACTTGAAAAATGACCCCTATTTGTTAGCGCAATCTAGCCCC CTAGACAAATTCAGCAACCAACCAACGGCGGTATATGCGTCTTTTAAATTTTATAGACATTCAAAAACGCTTTG GATAACGCTTAAAGACGCTTTTATCCATGAATTAGAGCAGCCCTTAAACAGCGCAACAGCAAAATTTAGCCAAAGAG CTTCTCAATGAGCCTGTGGATAAAAAAGAAAAATTTGAATCCCTATGTCAAGAAATCGCGGATCACACGCGATGGGA ATACACCAACGCGCTGAAATTAGTGAATTTCTTATGTTATTAGCCTATGCTGATGGGATTTTGGATAGCAAAAGAAAA AGAAATGTTTTAGATGTGGGGTGTGTTTTGCAGATAGACAAATCAAGATTTTAAACGAGCTTTATGACAAATTTTGAACGC TTCAATG	1358	NPLNPKTKTEEYDLKNDPYLLAQSSPL DKFKQTQTGAYMRLLKFLDIQKNALDN ALRTLFIHELEQPLNSEQQNLAKELLNE PVDKKENFESLCQEIADHTHGEYTKRL KLVEFLMLLAYADGILDSKEKELFLDVG VFLQIDNQDFNELYDNFE:RFN
HP0849	1359	CGCTATCGTGATTTAAAGGCAGCCTCCTAAAGGCATAGAGCCTGTGGTAAGGATTAAAGTCCCCCAAAATGAGGT GATTGTTTTAATGACGGGTTAAAGGCGAAGTGAAGTGAATACATAACGAATTAGACGATTTTATTATCGCCAGGA GCGATGGACACCCACTTATAACTTTGTGGTTACTATTGATGACGCTTAAATGGGATTACTGATGATTAGAGGC GATGATCACCTTTCAACACCCCTAAACAAATCGTCTTTATAAGGCTTTGAATTTTAAATCCCTAAATTTTCCATGT GCCGATGATTTGAATGAAGAGGGCAAAATTAAGCAACGCCATGGGCCACTAATGTGATGGACTATCAAGAAA TGGGCTATCTTAAGGAAGCTTTAGTGAATTTTATAGCGGTTTGGGTTGAGCTATCAGGATAAAGAGGTTTTTAGCA TGCAAGAAATTGCTAGAAATTTTATGATCCTAAAGATTGAAATTTCTCGCCAGTTGCTTCAGCTGGCACAAGCTTAAAT GGCTCAACGC	1360	RYRDFKGTTPKGPKEPVIKVPQNEVIG FNDGVKGEVKVNTNELDDFIARSDGT PTYNFVTTIDDALMGITD'VIRGDDHLSN TPKQIVLYKALNFKIPNFFHVPMILNEE GQKLSKRHGATNMDYQJEMGYLKEAL VNFLARLGWSYQDKEVFSMQELLELF DPKDLNSSPSCFSWHKLNWLN
HP0849	1361	GAAAGCAAGATCAAGAATTTTGAATTTTGCAAAGAAAAATGAAGTGAATTTGTGGATTTTAGATTCAGCGCATATTA AAGGCACCTTGAATCACATCGCTTATCTTTGGGCTTTAACCGCATGGCATGCTTAAAGAGGGGATTCCTTTTGATG CGAGTTGTTTAAAGGCTGGCAAGGCATTGAACACTCCGATATGATTTTAAACCCCGACTTGGTGGCTTATTTTCATTG ACCCTTTAGCGCGGATGTAGCGTGGTGTGTTTTCGATGTGATGATGTATATAAAACCCAGCCTTATGAGAAA TGCCCTAGAAATCGCTAAAAAGCCTTACAACATTTAAAGATTACAGGTTTGGCGATGTGGCTTATTTTGGCGCG GAGAAATGAATTTTATCTTTGATTTCCATTAATAAATTAAAGACGCTTCCAAATCCCAATACTACGAAGTGGATAGCGAAG AGGGCGAATGGAATAGGATAGAGCTTTGAAAAACGGCGTCAATTTTGGGCATAGACCGGGCAACAAAGGGGTTA TATGCTGTGCGCCCAACGGATACGATGATGATATTCGCACAGAAAATTGTGAAAGCTTAAACCAAGTGGGCTAG AAACTTTTGTGCTCCATCATGAAGTCGCGCAAGCGCAAGCGGCAAGTGGCGTGAATTTGGGATTTAGTGGAAGC GGCTGATAATGICCAAAAAACTCAAAATATGTTGGTTAAAAATGGTGGCTCAATTA	1362	ESKIEFFEFCKENEVEFVDFRFSKIG TWNHAYSFGALTHGMLKEGIPFDASC FKGWQGIEHSDMLTPDLVRYFIDPFSA DVSVVFCDVYDVYKNCPEYKCPRSIA KKALQHLKDSGLGDVAYFGAENEFFIF DSIKIDASNSQYEEVDSEEGEWNRD RSFENGVNFGHRPCKQGGYMPVPPT DTMMDIRTEIVKVLNQVGLETFVWHHE VAQAQGEVGVKFGDLVEAADNVQKLK YVAKMVAHI

HP0849	1363	AAGCAACTGGATAGACCTACCAAGAGACCAACCAAGTGCTCAAAAACCTAGATGAGATTTTCAACCACCTAGC CCTAGTGCTAATAATGAATGGGTGAAGAAGATGCTCTAAACATCAAAAAGCGGCCATTGCTTTGAGAGGAGATTT AGCGTTATTGAAGGCCAATTTTGAAGCGAATGAGTTATTTTCATCTCAGAAAGATGTGATTTTCAAACTTATATGTCT AGCCCTGAACCTTTTAACTATATGAAATCAATCCCTTAG	1364	KQLDSTYQETNQVLKNLDEIFSTTSP SANNEMGEEDALNIKAAIALRGDLALL KANFEANELFFISEDVIFKTYMSSPELL LTYMKINPL
HP0849	1365	GAAGATGATAATATCACGCATGTGAACGACAAGATTGATCCCTTGAATGATATAGAAACTATTGAATTGGAGTTGATTT TAGCGGATATTGCCGCTTTAGACAAAGGATCGATCGCTTGCAAAAAGCCTTAAAGAGCTCAAAAGACGCTAAAAAT CTTTAGAAATGCCCTTTGAGTTTAAACGCGCATTTAGAAGAAATTAACCGCGGAAACCTTTCCCTTGAATACAAAGC GAGGCTTTTGGAGTTGGACAAGGAATGCGTTTTTATCTATATAAAAATGATCTATGTCGCTAATGTGGCGGAA GAAGATTTAAACGCGCTCAATGAGCATGCCAAAAGTCAAAACCATGCGAAAGAACAAATAGCGAGTTTGTTCG CTTGTGTCTAAATTAGAAGAAGAAATGCTTCTATGAGTGGAGTGAAGTCAAGAAATTTTGCAAAGTTTGGCGCT AGAAGAAAGCGGCTAGAAAGACCATTCGTTTGAAGTTTGAAGTATAGTTTGAATTTTACCGCTGGAGT CAAGGAAGTGGATCATGGACGATTAAAGGCTCTAGTGGCTGTGCTGGGTGATCCATAAGGATTTT GAAAAGGCTTCAATTAGAGCTGAAACCATCAGTTATGATGACTTATCGCTTAAAGGCGGAGCGGAGCGAAAGA AAAGGGAGCGTTACGCAATTGAAGGTAAGGATTATATCGTTCAAGATGGCGATGTTGCAATTTTCGCTTCAATATCTA GTCTGTCTTATTACTAATTTCTCATAGAAATTGACACCCCAACAAAGTCTTAAAAAATCTATGTAGAAATTAAGCGA TATTGCGGGTTGCAATGCAGTTTTCGCTTAAACCCCAAAATATCAGAGCGGTGATGCTTTGGAAATTTATTTGAAAA AGTTTGTAAAGAGTGGCCCCCTTAAACCCCAATGATCACCTTGATGTTTAGGCGATCCTTGCAAGCTCAAAAAATTT AAACCACTATT	1366	EDDNITHVNDKIDPLNDIETIELELADI AALDKRIDRLQKALKSSKDAKNLLECAL SLKTHLEELKPAKTFPLNTSEAFLELDK ELRFLSHKKMIYVNVGEEDLNALNEH AKKVNHAKEQNSEFVALCAKLEEM VMSGDEVKEFLQSLGVEESGLEKTIR LSFKELGLINYFTAGVKEVRSWTIKGS SAPVAAGVIHKDFEKGFIKRAETISYDDFI AYKGEAGAKEKALRIEGKDYVQDGD VLHFRFNI
HP0849	1367	AAAACCACTTTTGAACCGCAAAAGCTGAATGCAGTTTATGTTTTATTATCAATAAGGATTTAGCCACGCTGGGTCA AAAATAAGAGATTGCTAGAAACCTTTAAATACGAAGGCGAAGCGTATTTTAGACCAAGAAATAAAATCCTGTATG CGGGCGTTAAAGAGATGATGTGCAATTTATTGAGAGAGAGCGCGTGTAGCCGTTGCGACCTTAAAAAACCTCGCT TTTAAAGCGTTAAAGTGGGCTTATCTTGTGTGACATTTCTAAGATAACGCGCTTTTAGAAAACCTTGAAGCGG CTGTTTTGGGCTTGAAATTAGTTTGTATGAATACGACACTTTTAAATCCAAACAAAGAAAGCGTTTAAAGAAAG CCATTGTGCGCTT	1368	KTFENAKAECSLVFINKDFSHAWVKN KELLETFKYEGEVFLDQENKILYAGV KEDDVHLLRESACLAVRTLKKLAFKSV KVGVTGCGAHSKDNALLENLKAFLGL KLGLYEYDTFKSNKKESVLKEAIVA
HP0849	1369	TTAAACGATGACGCCCCCATTAACCTAGTGCATTGGCAAAATGCATTAAAGAAAGTCCAACTGATTCAAAAGCGCTCCA GCAACACACCTATAAAGCGGTGCAAAACCGCTCACCTTTGAAACGCTTTTAAACAAACGCTTAAATCATGGA GTTGAAGGGCAAAAGGTGATGCTCTTAAACCGCTAACTGATTTCTAAACAAACCATGATTTTAAAGAGCGCTCT TTGAATGCTTTAGAAATGTTTTCTTACCAAAATGACATCTACCTCTTGTCTAAAGAGTAAAGTGAATAGAAATCC AAGCTTCAACAGCAAGGATAAAACCGCTCCGCTTCTCTTTTACCCAAAGGTTTTCATTAGCCCCACCGCTA ACCTGAAAGAAAATCTCAGCAAACTAACCTTGACAAAAGACACCAAGCAACCCCAAGCCCTTTAAACACT CTAGAGTTAAACCCCACTAAATTTAAGCCATGCTTATAAGCGCTAGCGTTATTGCTGCTTACTCTTAATATTG TATGTCATCAAAAATAATGTTCCACACAGGCTCTTTCTGCAAAAGATTTTAAAGTAAAGTAAAGTAAAGTAAAGT GTCGTGTTGATGCGAACCAATAATCAATTTCAATAGAAACCAATAGGAGCGTTACTTGTCTTACTAAGCGATAAAT ACGGCTGCTTTTAGACAAAATAAGCCCAAAACATCTAAAGAAAGCTGATTAAAGAAAGCTGAAATAATATAAGA ATTCAAAATTAGGAAATTTATATGCGGGAATTTCTAACTACACCTGCTAAGTTAGGGAATAATTTGACCCCTGTGG ATCATTCTAACAGGAATTTTCTTCTCTCATCTGCTGATTTGTTACACTGCTGTTGATTTATTTTATTGAAACACA GAGAAGATTTTCTCTCAAAACCCCAAGCTTGTAAATTAATCTGAAATTTATTGGTTTTAAAGAGAGGCCATT GCAA	1370	LNDDAPIKLVHWQNALKEVQPD SNAP ATPPIKAVQTTLTFTETPNKTPKIMEVE GQKVIVLKNALDSKKTMDFKASLNA LEMFSYQNDIYLLSKKAKVELEIQASNS KDKRLRFLPKGFHLAPPPNLKEKS QQTNLAQKDTNEQPSPLNTLELKPPL NLSHAYKALAVIAALLILYVKKIVPTQ GSFSAKDFKLEISVLGRVDANHKISET NKERYLVLLSDKYGLLLDKISP KTSKEE LIKEAENNIKNSKLG NLYAGKF

HP0849	1371	CCCCGATAACGACCCCTAATGGAGCATGGATTAAATGATAATCCTAGCGCAAAAGTGGGAATATGAAAACGGGGTATT TTGGAGTTACTAATCCTTACACAAACAAAGTGATTATCCGCCTGTGGTATGTTTGGCGTTTTCACAAAATACGA TACAAAACACACATTGATGAGGGCGGATTGCTTTAAAAAAGAGCATAAGGATAATGAAAGGGGCTTTATTACAAAC GCTATTTAAAGGATTTAAAAACCCAGCAAAAACCTTTTGATAGTTTGGGATAATTTAGCGATAATTTGTTATATGAACCAAGC GGCGACTAAAGAACTTTTAAATTTGGGAATGGGAGATATTTTACTTATCCAAAAGCGGTAGAAATTTATGAAAAAATC ATTCTGCATTCAACCCACGCCAAACGAGGGCGACATCATCTTAGATTTTGTCTGGAGCGGACAAACCGTGCATGC GGTATGGAATTAACGCAGAAAGATAAGGTAATAGGGAATTTATTAGTTCAATTTGATGAAGATAAAAGAAGA TGAAGCGCTTATGATTTTGTAGAGGAGTTAAAGTGCAAGCCTGTCATTAGCGACATTACCATAGAAAAGGGT TAAAGAGCGCCCAAAAATAAGCCAATTATCAAAAAGATAGCGGTTTGGATTTAGGCTTTAAAGTTTATACCTTACA AGACAAAGTGCAAAATTATAAACGACAAAGAAATAACGCTTTTAAACCGATCGGATTTAACGCCCTTTGACAAAAGC CCTAAATTTAGCCCTACAAATGCGGCAAAACGCTCAATCAAGCGCTAGAGATTATCATCAAGACAAACTCTACAAATG CGAAGACGCTTACTTTGTATCGTGTGCGATGAAGAGCGCAAGAGTATTTAGCCAAAAGCAAAAACGAAATGATATT TTAGACGGCTATGAAGAGATTGATTAGAAAGCCTTCTCAATCTCAACGCTAGCTTTAAAGAGCGGTTTAAAGCGGTGGT GTATTGATT	1372	PDNDPNGAWINDNPSAKSGNMKTGYF GVTNPYTNKVDPYPPVGMFWRFSONTI QKHIDEGRICFKKEHKDNERGFIYKRYL KDLKTTQKTDFSLIFSDNC'YMNQAATK ELLNLGMGEYFTYPKGVEI'MKKILHST TPNEGDIILDFAGSGTTVHAVMELNA EDKGNREFILVQIDEEIKEDESAYDFCK KELKSAKPVISDITIERVKR'AAQKISQLS KDSGLDLGFKVYTLQDKVQIINDKEEIT LFNRSDLTPFDKALNLALQCGKTLNQA LEIHKDKLYKCEDAYFCIVCDEEAQEYL AKSKNEMIFLDGYEEDLEAFLNLNASF KERLSVVY
HP0849	1373	CATTGGAGCCCCAGGAGTGGTAAAGCAGCTGATGCAGAGCTTATCGTAAAAATAACAGCGAAACAATCGCTCATT TTTCTACCGGGGATTACTCAGGGCTGAGAGCGCTAAAAAGACCGAGGCTTATTGATTGAAAAATTCACCTCT CAAGGCGAATTAGTGCCTTTAGAAATTTGTGTAGAAACGATCCTTTACGCGATTAAAGCTCTGGTAAAGGGATCATT TTAATTGATGTTATCCTAGGAGCGTGGAAACAAATGCAGGCTTTGGATAAGGAATTAAGCGCTCAAAACGAAAGTAT CTTAAAGCGCTGATTGAAGTAGAAGTGAAGTGAACACTGCTAAAGAAAGGTTTTAGGCGCTCTAGGGGGCT GATGATAATGAAAAGGTGTTTCATAACCGCATGCGGTGTTTGGATCCGTTGGCGAGATCCAAAATTTTACAAG AATAAGAGGTGATAAAGCGATCGATGGGAGAGGAGCATTGAAGAGATTGTGGCGGAAATGCAAGAGTATATCTT GTCTTTCGGTAATTAAATGCACCTCAAGGAGATAGCTGTGATTCTGTATTATCATCTTTTAAAGAAAGTCAA AGCGGTTTGGATACTGAAAGCTCGTTTCAGAAATCCAATGAGAAATTTAAAGCGGCTGTGTTTTTCAAAATCTTTGAC GCTATTAGCCCTAAACACGAAGATTT	1374	IGAPGSGKTTDAELIAKNNSETIAHFST GDLLRAESAOKTERGLLIEKFTSQGEL VPLEIVETILSAIKSSGKG' LIDGYPRS VEQMAQDKELNAQNEVILKSVIEVEV SENTAKERVLGRSRGADDNEKVFHNR MRVFLDPLGEIQNFYKNKKVYKAIDGE RSIEIVGEMQEYILSFGN
HP0849	1375	TTGATTGAAAAGCGAAACCTTCTATGGCGAAGATAAGGAAAAATTGAATGTTTGAATGAAAAATCCAGCGCGCTA GAAAGGGAATTGAAACAAAGAAATGAACATTTAGAGAACGCTTTAAAGAGCAAGAATATTTGAAAAACGCATGGCTT TTAGAAATGGAAAACAAAGAAATCTTTCACAAATAAAATTTGGAATTTGAAATCTTACCACAAAGCCCTAAATA TCTTAAAGCGAAGTCGCTTCAAAAGATACTAGCTCCATGATAGAAATCCATAAAGCGAGCGAAATTTTAAAGCA AACACAAACAAACCAAGAGATCCCAAAATCATAAGCAACTTTCAAGCCAAACGAAAGCGCGCTACAAGAAATGAA AGCGTGTCTGATTGTACAAATTTTAGACAAGGGCTATTATTGGATAGAAACCGAGCTTGGCATGCGTTTAAAAAGCGCA TGGGAGTTTGTGAAAAAATCCAAAACCCCTAAACAAATTTCAACCCCTTAAACCAACCATTCCTAAACCTAA AGAACCGAGCTTGGCGCTTGATTAAAGGGGGCAACGCGAGGAAGCCCTGGATTACTAGACGCTTTTTTAAAC GACGCGCTTTAGGGGCTTTGAAGAAAGTGTGATTGGCACGGCA	1376	LIEKAKTFYGEDKEKLNVLIESSALER ELKQKNEHLENALKEQEYLKNAWLLE MEKQKEIFHNKKLELEKSYQQALNILKS EVASKDTSSMHKEIHKASE'LSKHKTN QEIPQITNFQANEKARYKNESVLVQIL DKGY'YWIETELGMRLKAHGSLLKKIQK PPKNKFKPPKTTIPKPKAE'LRDLRG QRSEALDILLDAFLNDALLGGFEEVLIC HG
HP0849	1377	GGGGCGTCTAATAGGGGATTGATGATGTCGTAATCTCATAGAGCAAAACGGCTACAAAACCAAGCTTTGGCGCT ATAAAATCTTTATCATTGATGAAGTGATATGTTCCACCACCGAGCGTTTAAACGCGCTTTTAAAGACTTTAGAAGAGC CTCCTAGCCATGTGAATTCCTTTTAGCGACAACAGACGCTTGAACCTGCCGCTACCATACCTAGCCGACCCAG CATTTCAGGTTTAAAAAATCCCTGAAAATTCGTTATTCTCATTTAAACCACTTTTAGAAAAGAAACAAGTGAAGTA TGAACAAAGCGGTTAGAAAACCTGGCTCACAGCGGGCAAGGGAGCCCTAAGGGATACGATCACTCTTTTAGAACAA GCCATCAATATTGCGATAACGCTATCACAGAAAGCAAGGTGGCTGAAATTTAGGAGCGATTGACAGAAAGCGTTTT AGAAATTTTCCAAAGCCTAATCAACCAAGATGAAGCGCGATTAAAGAGCGTTATGCCATTTTAGAAAATTTATGA AACCGAGAGCGTTTAGAAGAAATGATGCTTTTTTGAAGCGAAATTTAGAGCCCTGATTTTATCTA	1378	GASNRGIDDVRLNIEQTRYIKPSFGRYK IFIIDEVHMFTEAFNALLKTLEPPSHV KFLLATTDALKLPATILSRTQHFRFKIP ENSVISHLKTILEKEQVSYETSALKLA HSGQGSRLRDTTILEQAINYCDNAITES KVAEMLGAIIDRSVLEDFQSLINQDEA RLKERYAILENYETESVLEEMMLFLKAK LLSPDFYS

HP0849	1379	TTTAAAAACAGCGCGCTGTTTAAAGAACTCTCAAGCCAAAGCGCTAGACGGATGCTCAATTACATGGCTTACT AAAGATGAAATTAAGCATGATTTAGAGCAATTAGAAAGAAATTAGAGCCCAAAAGCGCTTAATCAGCGCT TATGAAAGAGAGCAAGAGAGGCAAGAAATCGTATGCCATTTAGCGGAAGCGACAGCCGTTTTCGG GTAATTATGCGGAGAGAAATTAACAACCTGATTGCTTTCGCTCAGATTATATCGGTCGTGTATAGGCAAG ACGGGAAATATTGAAGCGTTTAAAGGTCAGCGGGTGATATAGAAATTTAGCGAAGATAGCAGCAATTGTGT TTGCCAGTTTCAATCTTTATCGCGTGAAGTAGCGAGCGCTTAAATTTAATAGAACGCGCGTATCCA GCCTAACAGGATTGAAGAGGTTTATCATAGAGTCGCGCGCAACCTGGAAGAAATGCTTCTGAAGGGGAGAGC GTGGTGTAGAAATTAGAGCTTGGAGCTATGGAAGATGAGCTTAAATTTAATAGGCAAAATGCGTTATCGCTCCAGT TTTGGGCAAA	1380	FKKQRAVCKESQAKALDAMLNMYMT KDEIKSMILEQLEEELEAQKSALIRRYE KEAKEEGKKSYAILAEATARFAGNYA AENLTTRIALPCSDYIGRVIGKDGKNIE AFKKVSGVDIEFSEDSSSELCLSSFNLY RREVASETILKILIEDGRIQPNRIEEVYH RVARNLEKELLSEGESVLELELGAME DELKILIGMRYRSSFGQ
HP0849	1381	GATCGCTCGTTGTATGTGGATTTTGGATCTAACGGCTAAAGATTATCAGGTGAATGCGAAATGGCTAATAGAGAT GTGTTAATGCATTTGAATTCGGGATTGGCTCTGAAAGCTATAACTCTCAACTAATCTTCTGTAGAGTGGCTATCC CTTGCCGGTAACGCTAAATAATCTATCAAAAGCGTAAATCTTGATTTGCAAGCGGGACGCTCGCGCAAAAT GAAGTATGAAACGAAACATTAGAAATCAAGCCAACTCTACTTAAACCAAGCTCAAAACCAAGAGCATACATTGAA ACCAAAAGAAAGCCATTGCCAATAAGAGCGTTTGTAGAAATGGGCGCATCGCTTATGAAGCCCAAAATCGG GCTTTTGAATATTGATTTATCAAAATCTTACATGGAGCTCTTATTACTAGCGGAAGCCAGATTGAATACATT GATATTAGCGCGCTTTAGAGAGAGACTTTAGGGAGAGTTTACCAGATTAGGAGAAATGCAATTGAAGCGGCGTTA TTGTGGCTTATGTTAATGGCGGTTTCAATGGTGTTCTTTAAAGCCAAAGAGTATTAGAAATTTATTTAGAAAG AAAAAATTTGCAACCCATGGGTTAAAGGTGGTTAAATTAGATAAGAAATCTTTAGTAAAGGCTTCTTTTAAACG CTTATATTGATTTGATAGTAAAGCTCTGTGTGCAGAGCTTGAGTTTGATCGCTGTGGTCTGTTTATAAAA GAGAGGGC	1382	DRSLYVDILDLTAKDYQVNAKLANRDV FNAFEFGIGSESYNSSTNLSVEVRPLP VTPKNYQKRKFLDLQSGTLAQNEVMK RNIRINANSYLNQLKTKAEYIETQKEAIA NKKRLMEMGRIAYEAQKIGLFEYLIYQN SYMDALITLAEAKIEYIDISALLEETLGE SLTRLGELH
HP0849	1383	ATTTTGTATGAAAGAGTCGTTGAGCGAGCGGTATTTGCAGCATAAGGTTAAGGACTTTTGAAGAGGGGGT TTATGATCTGAGCTTTGAGCCTATTTAGCCTTGAATGCGAACCGAGCAAGCCCATGCTTTCCTAGTGCGAAGG ATTTTAAAGCGGAGCACAGCATCTTTGGATATGGGATCAAAATACGAACGCTATTGCTCTGATAGGACTCGCA CGGCTTTTGTACCTAAAGATTTGTCTTAAAGAGAGCAGAGTTTCAAGGATAAAGAGCGTCAAAAGATTATG ACATTGTGAAGAGCGCAAGAAAGGCTATTTAGGCAATATTTCACTCAGCAGCCGGGTAAAGAGCGGACAGCTT GGCTAGGGAGTGATTAGCGATTATGGTTATGGCAATATTTCACTCAGCAGCCGGCATGGCATGGCTTAGAC ATCCATGAGCTTCCCTATATTTTCATCGCGCAGTGAACCATTTTAGAAGAGGCGATGGTGTCTCTGAGAGCCTGG GATTTATATCCCTGGGTTTTGGGGTGGCATTGAAGATTAGTGGTATCAAAATCTAGGCTGAGCTTTTGTG ATGCGAGAGATCCTTACTAGCGCTTTTCCCTAGCCTTTTAAAGAGGCTTGAATTTTCTAACAGGGTGGTTTA GGGTGGGATCTAATCTTAAATCTTTAAATATTAATAATTTGTTTGTATTTTAAATCATAGTAAATCGG GAAATTTTCTTCCGCAATTTATATCAATCCGCTTTTGGTTACACTAAGCAACCTAATTTTATAACGCTACGATC ATCCTTAAACATCTTTAAGTTGCGCATTTTGTCTGTGTTTATATAGAAAGCGGTTTGGCCGCAAGGA AGCGCGATTTTAAAGACGCTCCAAGAACTTTAGACATTGATATTATCGCTTCAACCAAGTCAATTTAAGACAGAAATG ATTTGGCTTTACC	1384	IFDEKESLSERYLQHKVKDFLTREGVY DLSFEPILALNANASKPHALPSAKDFLK AEHSILLDMGIKERYCSDRTRTAFFD PKDFVKREQSFKDKERQKIYDIVKEA QEKASGIRAGMTGKEADSLARGVISD YGYQYFTHTSTGHGIGLDIHELPIYSSR SETILEEGMVFSVEPGIYIPGFFGVRIE DLWIKNSRSELL

HP0849	1385	ACCCACAGCTCCAAAATCAACCCACACCCCAACCAAGGGCTAAACCCCAAGAGCTTAAAGAGAGAA GAGCAAGCGGATTGATGAAGTGTAAATAATGAAATTTTAAAGCTGGCTTATAGCTATCACTCATCAGCTTGCAGGAC ATGAACAAGGGGGGATTGTTAGAAAGGATTAGGGTATTAGAAAGATAGCAGGATTAATGTTTATGAT GCTCAATCCGGATCAGGATAATTTGAGCTCCCAACGCTTATGAATCAAACTTAAAGGCTTGTGATTG GTAGGGCATGGTATGCCAGACAAGTTTATGACCATGAATACCGTGTGTGAATAAGAAATGAAGGCTTCT ACTAAGAGCCGGCTTTGGAATGGACGCTTATGATTGAACCTAAATAAAGAAAGCCATTATCAAGGCTAT ACCATATTGATCCAAGCACCGCTTATGGACGACACCCAGGATTAAGTGAATAATACGCTGAAGATTTTATCACT AAAGATGAAGTGAATCCCTTTAGAGCGCTTGGCCAAAGATTATCCTACGATTGAGAAGAGTAAATAATCCCC ACCGGTGGATCCGATCAGCTCTGCAAGCCTTGTACATGAATAATCCCAATAAGACATGCTCACTATTTTAGAA ACGATTACCGATATTGCCCATTTGGTTCAAAACGATGTGAATATCTTAACCGAACAAGTGAGGGCGAGGCTTCTAG GGTGATCACTAACGCTTTTAAATCTGAAGACGGCGTTTGAATTTTAACTTTTCTACCGATAGCGAACAATTTTG CTTAATAAATTGCGAGAAATGGCACCTTCTAAAGTTTGTCTCAATGTGGCGAATTGCAAAAACCTCATTGAAGTG GTCCTGAAGAGGC	1386	PHSSKIPHTPTTRAKTQEELKREEEQ AIDEVLKIEFLELALGYQLISLADVKQG GDLLERIRGIRKKIASDYGFLLMPQIRID NLQLPPTHYEIKLKGIVIGEGMVMPPDKF LAMNTGFVNKEIEGIPTKPEAFGMDAL WIETKNKEEAIQGYTIIDPSTVIAHTSE LVKKAEDFITKDEVKSLERLAKDYPT IVEESKIPTGAIRSVLQALLHEKPIKD MLTILETTDIAPLVQNDVNILTEQVRAR LSRVITNAFKSEDRGLKFLTSTDSQF LLNKLRENGTSKSLLLNVGELQKLEVV SEE
HP0849	1387	CATGGTAAACCTTCACTGCTGGATAAAATCCGTGATAAAGAGTCGCTCACACGGAAGCTGGGGGATCACTCAGC ACATTGGCGCTTACATGGTAGAAAAAATGACAAATGGGTGCTTTCATTGACACCCAGGCGCATGAAGCCTTTAGC CAGATCGCTAATCGTGGGCTCAAGTACAGATATTGCACTGATTGTGATAGCGGCTGATGATGGGTGAAGCAGC AGACTATTGAAGCTTTAGAGCATCAAGCCGAATGCGCTGCTGCTATACCCCTGTGATTGGGCGGGGAGCATGA ATGTGAATCCGGACAAACTCAAGCCGAATGCGCTGCTGCTATACCCCTGTGATTGGGCGGGGAGCATGA GTTATCCCTGTTTCAAGTAAACGGCGGATGGCATTGACAAATTTATTAGAACCTTCTCATCAAGCGGCTATTAT GGAATTAAGCCCATAGAGAGGGCAGCGCTAGAGCGGTTGTTTAAAGGAGCGGTGGAATAAGCGGCTGGGC AGTAGCCACGGTATTGTCAAAGCGGGACTTTAAGCGTGGAGATAGTTTGTGCTGAACGGCGTTTGGTAAAG TAAGAACCATGACTGACGATCAAGGCAAGAGCATTCAAAATTTAAACCTCTATGTTGGCTCTCATCACAGGCTTAA GCGAAGTGGCGCTGCGGATCTGTTTAAAGGAGGAGTAAAGCATTCCATCGCGCTTGAAGCTCAAAAGAG GGGACTTATTACGCCAAAAGCGTTGAGTAAAGCGGATAGGCAAGGAGGCTAGAGGCCATTAAACACAGCTTGT TAAGGAATTGAATAATTTCTGTAGTCAATTAAGCGGATAGGCAAGGAGGCTGGGGTATTACTGAGAAATGATTGAGC AGAGCTTAATAACGAAGAGTGCCGATCCCAAGTGATCCACTCAGGGGTGGGGTATTACTGAGAAATGATTGAGC CTGGTTCTTA	1388	HGKTSLLDKIRDKRVAHTEAGGITQHIG AYMVEKNDKWVSFIDTPGHEAFSQMR NRGAQVTDIAVIVIAADDDGVKQQTIEAL EHAKAANVPVIFAMNKMMDKPNVNPDK LKAECALGYNPVDWGGEGHEFIPVSA KTGDGIDNLLITLIQAGIMELKAIIEGS ARAVLEGSEVEKGRGAVATVIVQSGTL SVGDSFFAETAFAFKVVRTMTDDQKSI QNLKPSMVALITGLSEVPPAGSVLIGVE NDSIARLQAQKRATYLRQKALSSTKV SFDELSEMVANKELNIPVVIKADTQG SLEAIKNSLLELNNEEVAIQVIHSVGVG TENDLSLVS
HP0849	1389	CATTAACGCTGAAACCCCAATGTGCGTTTAAATGACATGGCAGGCAATGAAGAAGCCAAAGAGAGTGGTAGAAA TCGTAGATTCTTAAATACCTGAACGATACGCCAATTTAGGGGCTAAATCCCTAAAGCGCTGTTATTAGTAGGGC CTCCAGGAACCGGTAAACCCCTTTAGCCAAAGCGGTAGCCGGCAAGCGCATGTGCCGTTTTCTCTATGGGAGG GAGCAGTTTCATTGAAATGTTTGTGGCTTAGGGCAAGCAGGTTAGGGATTATTGAACCCGCTAAACAAACAAAG CCCCTAGCATCATTTTATTGATGAATTTGATGCCATAGTAAAGCCGAGCGGCTGGAGCGGTGGTGGAGCGGAA CGATGAAAGAGAGCAACCTTAACCAAGCTCTTAGCCGAATGGATGTTTGGAGCGGAAATGCCCTGTAAATTG TCTTAGCCGCAACGAAACCGCCGAAATCTTAGATCCGGGTTAATGCTCAGGGCGCTTGACAGCGCAGGTTTT AGTGATAAGCCTGATTTAATGGTAGGTAGAAATCTTAAAGTGATATTAAGGCGTGAACTTGCTAATGATGT GAATTTGCAAGAGTCCCAACTCACTGAGGCTTGCAGGAGCGGATTTGGCAATATTATCAATGAAGCCGCA CTTTTAGCAGGAAGAAACCAACCAAGAAAGTCAAGGCAACATTTAAAGAAAGCGGTTGAAGAGGATTCAGG GTTAGAAAGAAAGCAGCGCATCAGTCTTAAAGAAAGAAATCGTCCCTACCATGAAGCGGCGATGCCGTG ATTTCTGAATGACTAAAGGGAGTGTAGGGTGAATAAGTCTCTATCATTTCAAGGGGCGATGGCGCTTTGGGCTA CACCCCTTAACACGCTGAAGAAACAAATACTTGATGCAAAAGCACGAACCTCATCGCTGAAATGATGTGCTTTTAGG CGGAGAGCGGCTGAAGATGTCTTT	1390	INAEKPNVRFNMDMAGNEEAKEEVEIN DFLKYPERYANLGAKIPKGVLLY/GPPG TGKTLAKAVAGEAHVPFFSMGSSFI EMFVGLGASRVRLDLETAKKQAPSIIFI DEIDAIGKSRAGGVVSGNDEFEQTLN QLLAEMDGGFSENAAPVIVLAATNRPEIL DPALMRPGRFDRQVLVDKPDFNGRVE ILKVHIKGVKLANDVNQVAKLTAGLA GADLANIINEAALLAGRNNQKEV/RQKH LKEAVERGIAGLEKKSRRISPKEIKKIVA YHESGHAVISEMTKGSARVNVK/SIIPR GMAALGYTLNTPENKYLMMQKHELIAE IDVLLGGRAAEDVFLEEISTGASNDLER ATDIKGMVSYVGMSSSVSGLM/LEKQR NAFLGGYSSREFSEKTAEEEMDLFIK NLLEERYKHVKQTLSDYREAIEIMVKEL FDKEVITGERVREIIEYEVEVANNLESRLI PLEEQAS



HP0849	1391	ACGACGCACAACGTTGAAGAGCGATGATTTGCAGACATTTTAAATGAGTTGAGGACCCCAACCGGACGACAA TACGCCCATTTTTCGAGCTTGAAAGATTATGGCAACGCTTATGCATCACCAACACCGCTAAAGGCTCAGCCTA AAAATAAGAGAGGTGATTATTTACACCCAGCGCGGTGCATAGGATATTGATATAGAAAGCGGGTGTAGAAAGAT GAGCGATCTAAAGTTTAGAGCAAGTCAAAAATGGCGTGGCAATGGCGTGTGGAGTTTGTCTATTAGA TTGATTGTCAACACTTAAAAAATGCTTTTGGCGTTTAAAAAATGGTTTGTATAAAACGGCACAAAACCCCTA ATTTGATTAAAGTTTGAATTTACTTTATCTCATTTTATGATGAACTAAAAAAATTTGTTATAATCTAAAAATATTGGGT TAATTAAGTAATAATAGCTTGATGCTTCTTTTGTATGATGAACTAAAAAAATTTGTTATAATCTAAAAATATTGGGT GCTATTAAAGGAAAAAATGAAAAATAGCAGCGCTTTAAAGATCAAGTTTTTGTGGGTATATG	1392	TTNVEEIAFADILMSLRTQTERHNT IFASLKDYGNAYCITQQLKAHAKNKE VILHPGPVHRDIDIESAVLEDESKVLE QVKNGVAMRMAVLEFLLD
HP0849	1393	ACGCCCTTAGTGATGCTGCTGTTTGGCTATTCTTATGTTACGACACCCACTCTTACTATAAAGAAGAA ATTGCTTTGCTTCTGGCTCAAAACTGCTAGAGCCACTCAAGATAAATGATAGATCCGATGGATAAAGACGC AAAATCTATATAGATAGTCAAACTTATGAATCAACTCTTTCCAGATACCTTTTAACTTGTCTTCTAAAAAATACGATA AAGATACTAGGTTAGTATCCGTGCGGACAAACGATTGACTTATGACAAAAGTATTATTTGTTAAAAACGATTAAAG AAGCGGGTTTTTAAAGTTTTCTTTAATCAAAAGTCTTTAAAAAGCAGGCTAATTTGCATGAGTAAGAGCGCGATCT TTGTTGTTCTCG	1394	TPLVDMVLVLLAILMVTPTLTKEEIAL PSGSKTARATQDKMIEIRMDKDAKYID SQTYEYNSFPDFTNLLSKKYDKDTRVS IRADKRLTYDKVYLLKTIKEAGFLKVS TSP
HP0849	1395	GAGCTTATCCATAATGTGGCTTATAAGCATAAACGGGTATTGGGTGTCAGGTGTCAGGAGCGCACGAGAGG GGAATGATCTGTATTTGAAATGAAGAAGGGCGTTTACACAAAGTCGCACTGTGTTATGGCAATGAATGAG CCACGAGCGCGAGGAACCGCATCGCATTCACCGCTTACGATGGCGAGTATTTCTGATGAAAGGGCTTAG ATGTTGATGTTTATGACAACTCTTTAGATACGCTCAAGCGGTGCGGAAATGAGCGCGCTATTAGCGCGTATC CCTCAGCGGTGGGTATCAGCCACGCTAGCGGGGAAATGGGAACTTCAAGAGCGTATCGCTTCCACTAAAA ATGGCTCTACCTCCGTTCAAGCGGTGATGTCAGCAGATGACTGACCGACCGCCCTGCTTCCGCTGTT GCGCATTTGGATGCGACTACGGTGTGAATAGAAAGATCGCTGAAAGGGATTTATCCGCGGTGATCCTTTGG ATTCACCTCAAGGATTTTAAAGCCCTCAAAATGATCGGTGAGAAACACTATGAAGTCGCTACCGGTATCCAGCAGGTTT TACAAAATACAAAGGATTTGCAAGACATTTATGCGATTTGGGATTAGACGAATGAGCGAAGAGGATAAAAAACGG TTGAAAGGGCCAGAAAAATTGAGAAGTTTTATCCAGCGCTTGGAGGATTTAGAGGCAATACGATCATATTTCCCGAGAA AAATATGTAACCTTCAAGAGACTTAGAGGGCTTGGAGGATTTAGAGGCAATACGATCATATTTCCCGAGAA CGCGTTTTATATGTTGGTAGCATTAAGAGGTTTTAGAAAAAGCTAAAAACATGAAATTTCTAAGGGTTTTGTGA TGGCTTTGTTGAAATTAGTGTGTTAGTCTCAGGGGGAAGTCTATACAGGAGAGGTTAAAAAGCGTTGTGTTGCCA GGAGTTGAAGGGGAATTTGG	1396	ELIHNAVYKHNGYSVFAGVGERREG NDLYFEMKEGGVLDKVALCYGQMNEP PGARNRIAFGLTMAEYFRDEKGLDVL MFIDNIFRYAQSGAEMSALLGRIPSAV GYOPTLAGEMGKLQERIASTKNGSITS VQAVVVPADDLTDPAPASVFAHLDATT VLNRKIAEKGIYPADPLDSTSRILSPQ MIGEKHYEVATGIQVQLQKYKDLQDIIAI LGDELSEEDKKTVERARKIEKFLSQPF FVAEVFTGSPGKYVTLOETLEGFGIL EGKYDHIPENAFYMWVSGIQEVLEKAKN MKNS
HP0849	1397	GAAATGGCTCAAAAAGTTTGAAGAACTTGACGCTTATGAAGAGATTTTACGCCCCCAACCAACGAGCTGTT TTCAAAGAGAGCCCAAGGAATAGCTTTATGAAGGCTGTAGATTTATGAAATCAGTATTTTATGATGAAATCATCA AAGGCATTGAAAGTTCTGCTTTCGAGCGAGGAGAAATGTTTCAATGAAATGCCAGAAATCAGTGAAGCCCAAC TCAGAAATTCAGTTAGAGAAATGAAATGCTTGAAGAAAGTGAAGAACTGAGATAAGACGATGATCATTAAG GATAAATCCGCCCGGATAAGCGCGGTAGAAAGTGGCGCCCATTTTATAGAGAGCGATTTGCTCCCTATGG CGCATAGCTCCATTTTACTAGGGGCAAACTCAAGCTTGTAGTGGGTGTTAGGCGAGGATAATGACGCT CAACCCATGAGAGTTTGAGGATAAAGCTCCCATTAAGAGCGCTTATGTTTCAATTAATTTCCCTCTTTCTGC GTGGCGGAAGCGAGTTCTATTGGCGCGCTTCAAGCGGTGAATAGGCGATGGGAATTTGGCTAAAAAGAGCCTTAG AAACGAGCATTAATAAAGAGCAGGTGATACGATTTGTTCTGAGATTTAGAAAGCAATGTTCAAGCTCAATGG CGAGCGGTGGCAGGCTCTTTAGCCCTTTATGCAAGCGGTGAGAAATTTACGATT GAGGTGTTTATCATGCTTCTACGATTTATGTTTACAAGAGGGGATATTAGGCTTGGATTGGGGTGGA GGTGATGGCTATTATGGCGATTACGCCCTCAGCTTCTATAGTGGCGATAAGCCCGCAAGATGAAATTTGCTCG CTTGCTCTAAAGAGAGCTTATGATGATGCTTCAATTAATGATGAGTGGCGATGCTTTAAAGAGTTGAGTCAGATT TAGAGAGCACTATTACAGAAAGGGCTTTGTGCTTTGAAAGGATTTTGGCGCATGGCATTGGTAAAAAACCCTCAT GAAGAGCCAGAGATCCCAACTACCTAGAAAAAGCGGTCAAACTTAATAGCGGCCCTAAATCAAGAGGGCATGG TATTTGCTTAGAGCTTATGTTGTCTCAAAAACAGGGCGAGCTAAATACTAGCGGATAAGTGGAGCGGTGTTCA GTGGATGG	1398	ELAQKSLEETCTLYEEIFPHQNELFFK ESQGVFNERLLDLKNQYFDEIKGIES SALSERENVFNEIARKISEAHSEFSLEEI ELSLEKVKKTEIRRMIIKDKIRPKRALE EVRPILIESDLLPMAHSSILFTRGQTQS LVWGLGTDNDQAQTHESLEHKAPIKER FMFHYNFPFCVGEASSIGAAASRRREL HGNLAKRALETSIKNIKEQVIRLVSEILE SNGSSMASVCAAGSLALYASGVEIYD
HP0849	1399	GAGGTGTTTATCATGCTTCTACGATTTATGTTTACAAGAGGGGATATTAGGCTTGGATTGGGGTGGA GGTGATGGCTATTATGGCGATTACGCCCTCAGCTTCTATAGTGGCGATAAGCCCGCAAGATGAAATTTGCTCG CTTGCTCTAAAGAGAGCTTATGATGATGCTTCAATTAATGATGAGTGGCGATGCTTTAAAGAGTTGAGTCAGATT TAGAGAGCACTATTACAGAAAGGGCTTTGTGCTTTGAAAGGATTTTGGCGCATGGCATTGGTAAAAAACCCTCAT GAAGAGCCAGAGATCCCAACTACCTAGAAAAAGCGGTCAAACTTAATAGCGGCCCTAAATCAAGAGGGCATGG TATTTGCTTAGAGCTTATGTTGTCTCAAAAACAGGGCGAGCTAAATACTAGCGGATAAGTGGAGCGGTGTTCA GTGGATGG	1400	EVVHGIPTDYVLQEGDIIGLDGEVD GYGDSALTLPIGAISPQDEKLACSKE SLMHAINSRVGMHFKELSQILESTITER GFVPLKGFCCGHGIGKPKHPEEIPNYL EKGVPNPSGPKIKEGMVFCLEPMVCO KQGEPKILADKWSVSVSD

HP0849	1401	AGCCAAGGCGATTTTCTGATTTTTTGAAGATTAGGCTCGTTTTTGAAGACGCTTTTGGGTTTGGCGCTAGGGGG AGTAAAGGCAAAAAGCTCTATCGCACCGGATTATTTGCAAAACCTTGAATTGAGTTTCAAAGAAGCGGTTTTTGGC TGTAATAAACCAATTAAAGTCCAATACCAGAGCGTTTGAAAGTTGCGATGCGACGGCGCTAAAGACAAAGCCCT AGAGACTTGCAAGCAATGCAATGGGCAGGCGAGTGTATGCGTCAAGTTTATGAGTTTTCGCAAACTTGTG GGCGGTGTCAGGCAAGGCAAGATCGTTAAACCCCATGCCAAGCGTGCAAGGTAAACCTATATCCTTAAAGA TGAAGAAATTGATCGGATAATCCTGAGGCGATTGATCATCAAAACCGCATGGTGCTTAAATAAAGGCAATGAATA CGAGAAGGGAAGAGAGGGATTGTGATTTA 1403	1404	GYVGEDVENILTRLQAASDWNVQKAQ KGIVFIDEIDKISRLSENRSITRIDVSGEG VQALLKIVEGSLVNIPPKGGRKHPEG NFIQIDTSDILFICAGAFDGLAEIHKRTT QNVLGFTQEKMSKKEQEAIFLVQTHD LVTYGLPELIGRLPVLSTLDSISLEAMV DILQKPK 1406	1408	HSAEFLKSALLEASALLEKEQAKLEEC ERLDIEKVLERLGLMGLSGIHKDYGSIMHA KERLGHVKNELHNLKEIDSHCETYHKEI ERLKTECLKCEEISGFRKEYLAGFNAL LSAKAKDLLLLKSPSLVEDAPVSEKGA QKLVNLQNSQLETLSSGEYSRLRLAF MLLEMEFLKDFKGVVLDEMDSNLSG EESLAVSKALETLSHSHQIFAISHQVHIP ALAKNHILVFKENHKSLAKTLVNEERVL EIARMIGGSSENIESAISFAKEKLAQE
HP0849	1405	ACTCCAAAAGAAATCAATCCAAAGTCCATCAAAAATGGAGCAAAACCAATAAGGAATATTTCTTAAAGAGCAGCT CAACAAATCCAAAAGAGCTTGGCAGACAAACAGCGAGATGAAGATTTAAACCAATACTACCAAAAACCTAGAAA GCATCAAGCCTTTTTAAAGAAAGAGCGTTTAAAGGAGATTAAAGCAAAATTGACCGCTGAGCCGAACCCATGCG GACAGCTCGGATAGCGGACTTACAAAATTATATTGAACCATGCTGGATGTCCTTAAAGAGCCCTAAAGAGCGCATG AGCGCTTGACATTAAAGCATGTGAGAGAACAACTAGACAGGATCATTATCTTAAAGAGCCCTAAAGAGCGCATG TAGAATACTTGCCACCATGCAGCTTTAGAAATGCGCCGCAAGAAAGCCAGAAAGCAAAAGACAAACTAAAGGC ACGATTTATGCTTTATGGCCTCCTGGCTGGTAAACAGCTTAGCTAATCCATCGCTAAAGCGATAGAGCG CCCTTAGTTCGGATCGCTTAGGGGATTAGAGATGTAATGAATTAAGAGGGCACAGACGCACCTTATATAGGCT CAATGCCGTGGCGCATGTCCAAGGGCTTATTGAAGCTAAAGATGAATCCGGTCATGGTTTAGATGAAATTGAT AAGGTGGATAGGAGCGTTAGGGCGGATCCAGCGAGCGCTTATTAGAGATCTTAGACCTGAGCAAAATACCGCTT TAGGGATCATATGCGAATTTAGCATTTAGTGTGCGAAGTATTTTATCGCTACCGCTAACAAATATTGACAGAA CCCGGCCCTTTAAGAGACAGAAATGGAATTTATCAGCGTGTCCAGCTACACGCTAATGAAAAGAAAGAAATCGCTA AAAATTATCTATTTCCCAAGAAATTAGAAAAGCACGCTTAAAGCCTAGCGAAGTTGAGATTAGCCATGAGTGTGGA AACTCATTTAGAAAATAC	1407	CATAGCGCGAGTTTTTAAAAAGCGCTTTATTAGAAGCGGCGCTCTATTGGAAGAAAGAGCAGGCTAAATTAGAAGA GTGCGAGCGTTTGACATTGAAAAGTTCTAGAAAAGCTTGGCATGCTAAGTGGGATCATTAAGGATTACGGGAGTA TTATGCTGTAAAGAACGATTAGGGCATGTAAAACGAATTGCACAACCTAAAGAAATTTGATAGTATTGCGGAAA CTTACCACAAAGAAATAGAGCGATTAAAACCGAATGCTTGAATTTGTGCGAAGAAATAAGCGGCTTTAGAAAAGAGT ATTTAGCGGTTTTAACGCTCTTTAAGCGCTAAAGCGAAGATTGCTCTAAAAGCCCGAGTTTGGTTTTAGAAAG ACGCCCCCATGAGCGAAAAGGCGCTCAAAAACCTCGTTTTGAATTTGCAAAATCCCAATTAGAAACCTTAAGCTCTG GAGAAATACAGCCGTTGAGACTGGCGTTTCATGCTTTTAGAAATGGAATTTAAAGGATTTTAAAGCGCGTGTGTTGT TAGATGAAATGGATTCCAATTTGAGCGGCGGAAGAGATTGGCGGTCTTAAAGCCCTTGAAGCCCTTAAGCAGCCAT TCGCAATCTTTGCCATTTGCGACCAAGTCCATATCCAGCGCTCGCTAAAACCATATTTTAGTCTTCAAAGAAAC CACAAAAGCCTTGCCAAAACCCCTTAATAACGAAGAAAGGTTTTAGAAATCGCGCATGATAGGGGGAGCGGAGA ATATAGAGAGCGGATTTCTTCGCTAAGGAAAATTAAGGCGCAAGAAATGAAATTTTTCTTTTAAAGAAATTCAGC GAATTTTAAACGCTCAAAACGCTTTAGCCTCAACGCTTGA		

HP0849	1409	TAAGAGTTGGCAAGATGAAGAAAGTGAAGAAATACACAGGAGCCGACGGTGATCTCTAATAAAGCGCTCACCCAAAC AAGCTAACCAAGCATTAAGAAAGCTTACAGAAATGTCCCGGTCTGCAAAATAGGAATGCACAGGTGTAGGGGC TATGCTACTATCAAAATCCGTGGCTTGGAGCTGGGGTTCAGGCATAGCGATGCACGCTGATGTAGTCAAT GGTATTCCTGTTTATATGGCCCTACGCTACATTCACATTAAGCTAGACATTTCCCGTTACCTTCAAGCCATTGATCGC ATTGATGTGATCAAGGGTGGAGGCGAGCGTGCAATACGGGCTAACACTTATGGGGTATTGTCAATATCATCACTAA GCCATCCCTAATCAATGGGAAACCAAGCGGCTGAAA	1410	KSWQDEEVKTYGSRVTSNKAALQQ ANQSEELQNVPLQIRNATGVGAMP TIQIRFGAGGSGHSDATLMLVNGIPV YMAPYAHIELDIFPVTFAIDRIDVIKGG GSVQYGPNTYGGVNIITKPIPNQWEN QAAE
HP0849	1411	CCTTAATCGCGCTAAAAGCCTTGCAATGTTGTTTGAATAAAACGATTAGCCCCAACTGGAGCTTGAATTTTA AAATCTTATCTTAAATCCCTTATCTTACTAGAGACCAACCCCTAAATCCAGGCTTGTGAAAGATTGAGCC AAAAATCAGCGCCTTTTCCCAAACTAGACACTCAAAACAGCTCTTACTCCTAGCCCAAAAATGCCCC TAGAAAACGCCATTACTGAATGCAAAACGCTAAACCACTTATAGAACTTTTAGAGCTTTTCTTATCACATTTTAAG CGCGATAGAAAACCTGAACCTTGCTCACCCGCCCTTATGAACCAAGCCAAATGCTAG	1412	LNRAKKPCIVVLNKNLAPKLELEILKS YLKIPYTLLETNTLSKACCLKDLSQKISA FFPKLDTQNKLLTSLAQKIALENATEL QNAKNHLETLLELFSYHILSAIENLNLTR PYETSQML
HP0849	1413	GAGTGTATCGTTGAAAAGCCTTCCACITTTCAAGAGCTTGAGCGTGTTACGGCATGGTGTAAACGCAGAA GTGGCTGAAACTTTAGAAAGGTTGAAAAGGCCATTATAGCAATTCAAAACGCTTGAATAATGCAAAAAGTGGG GCAATCGCTAGGTAGAAACCTTAGCGCTCAAGTGCTTATGATAGGCCCATATCGTAGCGTTAAGGCTAAAG ACGTGTTAGAAAGTTCCGAGCTCTGTTCAATTCATTATCTAGCAAGGACGATTAGTGCCTTCAAGCAAAATTAG AGATCCGACGAGAAAATCTGCCGATCTGAGCTTTTGTTCCTCACGCTCAATTCCTACCCGTTTAAAGA CTTTAGAAATCAGATTCAATCTCTAAAGAAACACGAAATACAGATCGCTAAATCTTCCCAAGTGAGTTTTT TGGCTCTTATATGAAGCAAAACAAATTCGGTGTGAGACATGATCCTAGTTGTTGTGGCGTGGCCGGC GCATGCTATTCTTCTCCACAGGGCGCATCAAAAATACCAAGCGAGCAAAATAGCGGAGTGCAGAGTAGC GAACAATCCAGGCTAAAACAAACATGGAATATTAGTAATAAGACTTAAAGAGACGCTTCTTATTGAAAGAAAT ACAAAGCTTGCTTCTAGCGTGAATAGCCAAAGGAAACCTTAAACCTCAAGAGCAGGCTTTTACAAAGGCTTAA GCAAGCAACGCTCAAGTATGATGAGGAAACAGCTTCTCTATCGTGGAGGCA	1414	EVYRLKSLSTFQELVSVYVGMVLAEV AETLEEVKGYKHQFQNALKMOKVQ IARVETLGAQVAYDKAHIASVKAKDVLE VSQLSFNSILSSKDDLPSSKLEIRTEK NLPLDSFFVSSTLNSYPVLKTLENIQI SKENTKLQIAKFLPQVSFFGSGYIMQN NSVFEDMIPSWFVGVAGRMPILSPTGR ICKYQASKLAELQVSSEIQAKKNMEL LVNKTYKETLSYLKEYKSLSSVELAKE NLKLEQAFLOGLSTNAQVIDARNTLS SIVVEQ
HP0849	1415	CGCGCGTTGATTAAAGATGGCTTTTAGCGTTCAACAGCCCATACGCTGAAGCGTTTCTGAAAGT GTTGTTTGGATAAGACAAACCAAGGCAAGTAGGGGTTTAAAGCGACATCGCTAAGGATTTCCCTAAAG AAGCCCATAGCTTTTATGAATGTATCAAGCTTGATCGCTATGCAAAACGGAGTTTAAACACCGCTGAAGAGC AATCATCAATTTGATCGCTTCTTTTATGAGGGGCTAAACCAATGGCTGAAAGATTGATGTGCAAAATTTCTCAA AAGCGAAGAAATTGAATGGCAATTTGATGCGGATTTCAACGCTTGAGCTTGAGCGCGGTTTAAAGGAAGCGTTT GAAGATTGATGTTGAGCTCTAGGGTATTGACAAATAAGAGGATTTTATGAATTTTGAAGAAATTGAACCAT ATGGCTATAGCAATTAATA	1416	RALIKDGLAFKQAHYAEALRLFSEVLF LDKONQKAKVGAALLSDIAKDFPKEAHS FYELYQSLIAMQKRSKLNQAEQIINLIA SFDEGLNQMAEKIDVQISQKSEELNGIL YADFKRSLERGFKEAFEDLMFSSRVI FDNKEDFYEFELKELNHYGYELAIN
HP0849	1417	GTACAGACGGCTATGTTAAAGTCTCTTTAGTGGCTGATGAAGAGAAATTTATTAGATCAGGCTTACAAGAGCT CAAAACCTTTTAGAACATCGTATTGAGCTTAAGATATTACCATTTTATGCGCCACTAATGACGACGCTTAGAAATCA AAATTTATGCAAGAGCGTTTGAAGTGGGATTCGCCAAGCACGGAATCTAGCGCAAAATGTCTCAATTTGTAGAGT CTAAATCATTAAAGAACGCTTTAGAAATACGCTAGCGGAAGAACCTTACAGGCTTTTATAGCACACGCTTTTAA AACTCGCTGGATACCTGCATGATGCGATCGCTTAGCTGGTTTAAACCTAAACAGAGAGCGTGGCAGGCTTT	1418	VTGYYKVSVADERELLOQVLQEAQ NLLEHRIEKPOTILCATNDDALEIKNYL QERLSAIRPSTESSAKLSQFVESKIKN ALEYALAEOPYKPFYKHSVLKLAGYLH DDAIALAGFNPKEKESVAGF
HP1015	1419	TGGCAGAGTGTCTAAAGAGATTATGTGCGTACCGCTAAGCTAAGGGGTAGCTCCTTAGGGTGATTTTGTG CACACTTGGCTAATGCTTAAATCCCTGTAAAGACTATCGCAGGCTTGTATGCGCGGCTTTTAGGGGGAGCAT GATAACTGAAACGGTTTCTCATGGCTGGGATGGAAGTGGATTTAATGCGCTCAACGAGCGGATTTCCCGA TTATCCAGTCCATGCTTTGATTTATGCGCATGATGATATTGGGCTAATCTTAGTGGATTTTATACGCTTTTAT GATCTAGAAATAAGGTTGTCATAATGAGTCTTTTAGAGAGTTTATCAACAAATCAAAACAAATAAGGACGCGTCC TTGGGCTTGAGTTGCTTTTATTGTAATTTGCGGATTTTGGCCCTTTTAGCCCGCATGATCCTTATGTC AAACGCGCAAGATCGCTTTTGAAGCCCTATATGGAGCATGGAGGAATGCTAAATACCTTTAGGCCACCGATGAT TTGGGCGCGATATTTGAGCGCTTATGATCTATGGGCC	1420	AEVSKEDYVRTAKAKGCSSFRVIFVHT LRNALIPVTTIAGLMLAGLLGGSMITET VFSWPGIGKWIWVNALNQDRDFPIQSMS LIAMMYIGANLLVDILYAFIDPRIRLS

HP1015	1427	CGCACCTTTAGATTTATCAGGAAGTATTTCAAGTCGTTGTGCTGTTACTCATTTAGTCTTTTTAGCGCTAAA GAAAGCGCGCAAGCGCCCTAATCTCGCTAAACTCTATTAAATGGGCGGATTTTAGCACCGAGGATTTTGA CAAAGAAAGTGATATAATCTAAACCCCTAGCATTAGGCGGTTTGCTTTGATTGACTCTCCTGTTGGGCGG TGTCAGCGAGCGTGGAATAGCGGAAATCGCTGATTGAAGCAAAATGCCGTTTAGCGTATGCTAGGGG GGTTATGGCGAGCGGAGCTATTATGGGCGCATGCAAGCGAGGAGTTTATGCCCTAAAGCGAGTTTGATAGGA TCCATTGGGGTATTTTTCAGGTGCGAATGTGGAATTTGCTCAATAAAGTCGGCTAGCCACTCAAGCGGTGCA TGCGGGCGAATACAAAGAAATAGGCACCTTACCCAGAGCGTGGAACCCCAAGAAAGATTTTGGCAAAATTTAG TCAATGAGCAATACCAATGTTGTGAATGATGTCGCAAAAGCTAGGAATAGACGCTAAGGATTAAGGATTTTG CTGAAGGGAAGGCTTTAGCGCTCAAAAGGCTCTGAATTAAGCTCATTGATAAATCAGCACGATTAAAGCAAGCG CAAGATCGCTTAATGGAATTGAGTAAGTTAAAGCTTATGGCTAGAAAAGCCCTATGGAGCGCTTCATTGAA AAAGCCACGCAATCAGCCCAACATCATCACAAAGCCTTTGGCTATCAATTAATGAGATAAGATGTTAGAAAT TTATTTTAAATTCAGCTAGAGACTCTAAAGGCTTGTGAGCAGGATTAGCACCACTATCGCTAACAAAGGCTATA ACATCGTCAAAACGATGAATTTGTTGATCCCTTAAACAGCGTTTTCATGCGGTTAAAAATCCAAAGAAATCAA GCCCTTGAATAGTAA	1428	APLDFITKYKFSFVLLLVLFSSAKESA PSAPPNLAKEYLNGAIFSTEDFDKEVD KILTPSIKGVLLIDSPGGAVSASVELS EKIADLKQKMPVLAYARGVMASGSYY AGMQASEVYASKASLIGSIGVIFSGANV ENLLNKVGATQGVHAGEYKEIGTFTR AWKPNKDFLQNLVNEQYQMFVNDVA KARKLADKDYKDFAEKGVFSAQKALKL KLIDKISTIKQAQDRMLMELSKVKKAYWL EKSPMERFIEKATQSATNIITQAFGYQL LMR
HP1015	1429	ATTAGCTTTAGGCTGGGTGAGCGCGCTATCGCAAAATGTTAGCGCGCTGTTGAGTCTATGGATTTGAGAG AAATCCCTATTTTATCCATTCAATGAGCGTGGTCATAGCGTTTTAAGCATCACTTTTGCATGTCGTGTTGGCGGA GATTGTGCTAAATCTTTAGCGATCGCTAAATCTGAAAGGCCACCTTTTGGCGCACGCCCTTGCATGTTGTTTG GGTGGTGTATCCGGTGGTGTGTTGTTGATGTGATCGCTCATTTTGAAGAAAGATGGCATCAATCCTAA AGAGCATGAGCGGCATCTGAAGAGAGATTAAATCATTTGCGCGAGATTGAGAGAGGCGATTATTGATT CAGTGAGGCGGAATCATTAACGAGAGGATTTTCTGACACGAGCGCTAAAGAAATCATGACCCACGAA GACATGGTGTGTTGATGAAGAAACAGCTATGAGAAATATAGACATTGTTTAAAGGCCATTTACGCGCTAC CGTTATTGCAAGGTTCTAAGGATAACATTATCGCATGGTGCATATTAGGATTGCTTTCGCGCTCTATTTTACC CCCAAAATGCATGATTCAATCAATCGTTAGGAAATGATCATCGTCCCGAAAGCGCTTCAATTCCTCAATCCT ATTAAATGAAAAAGAGCAATCCATACCGCTTTGGTATTGATGAATACGCGGCGCACGCGGTTGCTCACTAT GGAAGACATCATGAAGAGATCATGGCGGAGATTAGCAGCAATACGACTTAAACAGAGGCGCATAAACAGCTTG AAGAGGCGGTGTTGAATTAGAGGCGATGCTGGATTAGAGAGCGTAGAAGAGCGCTTCACTTGAATTTGATAAA GAATGCGAGCAGTAACGCTTGGGGCTATGTTTGTAGAGCGCATGCTATGGAGGGAGATACAAATCG TTTCGATGGGTATCT	1430	LALGWVGEPAIAKLALFESMDLREN PIFIHMSVIAFLSITFLHVLGEIVPKS LAIKSEKATLFAARPLHVFVWFYFV RLFDVIAHFFLKKMGINPKHEDGTHSE EELKIVGESLREGIIDSVEGEIKNAXDF SDTSAKEIMTPRKDMVCLDEENSYEEN IDIVLKGHFTRYPYCKGSKONIGMVHIR DLLSRIFTPKMHDNFQIVRKMIVPES ASISQILKMKKEQIHTALVIDEYGGTAG LLTMEIIEIMGEISDEYDLKQEGINKL EEGVFELEGLDLESVEEALHIEFDKE CEQVTLGGVYFSLERMPMEGDTIVSH GYSFEVLSVDGARIKRLKAVKQDQGE
HP1015	1431	GGGGTAGAGGTGAAATCAAAATCAAGGATTGGACTATCAGGAGCAATGCCGGACCAAAATTTAGGGGTGTTTA AGGGGATTGATTGAAAGAGCCAGAAATGACGCTCAAGGATTCTAACCTGTTTGAATAGGAGCGATCAAA GATCTTTTATAGAAATATTGAGAAATTTGCGATCGAAACAAATAACCCAGGGAGCGTGGGATTGACAAATC GTTAACTGCGATATTATGAAACAGGCGGAGACCTTTGCTTTTGAATGTTTATGCTTGCCTTGACAA AAACCACCATTTGCAAAATCATCGTTTAAACGCAAGCAACGCTTAAATAGGGGTTTAAAGAGCGTTGAAAT CACCAGAGAAATTTTAAAGCGAGTATTCTAACAGCATTTAGAAAGCTATGAAGATATAGAAAGATTTATTCTAGCG AGCAACCATAAATGTTGTGTTGTTGATGATGACTTTTCTGCTTCAATAAGAGAAACACTATTATAAATCATGCC TAGAAACACGAATCTATTCAATGTTGCAACAAAGTTACATGCAAGCTTTAGTGAATGCGCCCATCGTCATCATGG ACGAACCGCACGATTTTAGCGGATAAAACAAATAATTTGGAACAATTAACGCTTACTCAGCGCTCAGGTTTG GGCGACTTTTAAAGATGATTATAATAATCTGATTATACGCTAGATAGCAAAAGCGTTTATTGTTGCCCTAGTGA AAAGCATTAGCGTGGCTGTGGGGGAGAGTAACGAGTGTTTTATAGAGCTTAAAGGGATTGAAAAAAGAAAGCT GCAATTAACACAGGATTAGAAAAATAAACTCAAGCGTCAAGGCTCAAGAGCATGATAATTTAGGGGTGGTAACT CAATCAGCGCTTGAAGATTACATTGTAGAAAAATCACTAAACTGAGATTGCTTCTCAATGGCTTAAATTTGT TACTGGATCAA	1432	GVEVKIKFKRLDYQEQCRDQILGVFKGI DLKEPENDAQRISNPVFEIGAIDLLE NIENLRSKQKITQGSVGDKSLNCDILM ETGTGKTCFLECVYALHKNHLSKFI VLTPSNAIKLGVLSVEITREFFKSEYS NTHLESYEDIERFILASNHKCCVLVMTF SAFNKEKNTINKSCLENTNLFNGATSY MQALVSMRPVIMDEPHRFLGDKTKKY LEQLNALLTLRFGATFKDDYNNLIYTL SKKAFDCALVKSISVASVSGESNECFLE LKGIKKEAANYTDLENKTQSVKVEH DNLGVVTQISALEDYVEKITEIRFLN GFNLLDQKEPFSHLLLEGEQEVMLKEA IKSH

HP0167	1433	ATCCCTCAAGAAATTCAGAAATTTACAACTGGCCAAACAAAGTGGGATGAACCCAGCCATTAGATGAAATCATG CAATTGAGCCTGGAATTGATGCCCTTACGCATGCGGAAATTCGGTAACGATTAAAGCGTTATTTAGAGAAAGTGTG CGCAAAATGATCTTGTTGCCCTGAAGATTTGAATTAAGGCAAAACGCATCTTAATGCTTGTAGGCCAACAGG CGTGGGAAACGACGACTTATAGCTAAATAGCCGCGCTATTCTAGGATGTTAGCTAAATAACAGGTGGGCA TTATCACTTTAGACAAATATCGCATTTGGGCTTTGGAGCAATTAAGCTGCTATGCTAATAAATGAAATGAGTATAG AAGCGGTGATTGACGCTAAGGATTTGCTAAAGAAATTAAGCGTTGGAATACCTGCAATTTATTTAGTGATACGA CAGGCAATTCGCAATACGATAAGAAATAATGCGGTTTGAAGAAATTTATAGATGGGTTATAATATTGATGTGT CCTTAGTGCTTTACGTTACCACTAAGTATGAAGACATGAAGATATTTATGATCTTTTGGGTTAGGGATTGACA CTTAATCTTTACGAAATTAGATGAGAGTAGGGGTTAGGAAATTTGTTTCTTTAGTGCATGAAGCCAAAACCTA TCAGCTATCTTTCTGTTGGCAAGAGTGCTATGATTGAAGTGGCTACTAATGAATATTTAGTGATTCATGC TAGATGGCTTTAGTAATCTAATAAGGAACAAGCATGAACAATCAAGCGAGCCGCTTAGATAATTTGATGAATATTA AAACCCTAAAGTTTTTTGATAATAAGGAATACCAAAATTCATCGCTATCACAAGCGGTAAAGGCGGTGGGA AATCCAACATTAGTGCTAATTTAGCCTACTCTATACAAGAAAGTTATAAGTGGGGTGTGATGCGGATATTG GTTAGCGAATTT	1434	IPQFAEYKLAQSGMKP\$HLD\$EIMQL SLEMLPLRMRENSVTIKRYI\$REVL\$RKM ILCCPEDLNL\$RQKRLMLVGP\$TGVGKTT TLAKLAARYSRMLAKKYKV\$GIITLDNYR IGALEQLSWYANKMKMSIE\$AVIDAKDF AKEIEALEYCDFILVDTTGH\$QYDKEKI AGLKEFIDGGYNIDVSLV\$VTTKYEDM KDIYDSFGLGIDTLFTKLD\$ESRGLGN LFSLVHESQKPI\$YLVGQEVPM\$DLKV ATNEYLVDCMLDGF\$SNPNKEQA
HP1014	1435	AAACCCTAGTCAGCGGCGGACTAGAGGGATTGGCAAGCGGATATTTGTACGCTTCGCTCAAAGCGCGTGAA TATCGCTTTCACCTACAATAAAATGTTGAAGAAGCCAAACAAATCATAGAATGTGGAGCAAAATATTTCCATTAA GCCAAAGCCTACTCTTAATGTTTTAGAGCCTGAGCAATACACGGAGCTTTCAAGCAAAATGACGCTGATTTGAC AGAGTGATTTTTTATTCTAACGCTATTTATGGCGTCTGCTGCGGGGATTTGCACCGTTTATGCGATTA AAACCTAAGGGTTAAACAACATTTACACAGCCACCGTGTAGCGTTCTGCTGAGGGCTCAAGAAGCGGCAAAAC GCATGCAAAAATAGCGGTGGGCGATCGTGAGCTTAAGTTCTACCGGAACTAGTTATATGCTTAATACGCC GGCATGGCAATTCCAAAAACGCCGTAGAAACCATGTTCAAAATACGCTGCCGTGATTTAGCGCAATTTAACATTAG AGTGAATGCGGTTAGTGGCGGCTATTGATACGGAGCCTTTGAAAGCCTTCCCTGATTATGTGGAGATTAAAGAA AAGTAGAAGAGCAATCGCCCTTAAACGCAATGGCAATCCTAACGATCTAGCGGAGCGGCTATTTTTATGCGAT GAGACCCAAAGCGGTTGGCTTACAGGGCAACGATCGTTGATAGTGGCGGACTACTTTTAAATAAAGATATTTCTT GCAAAACATTATCCACATCCACCAAAACAAAGAGTTGCAATTCATTAAAAATGCTTGTGGCTATTTTTCGCCCT TTGTGTGGGCTATTCTGTAGTGCTTTTATTGTTTCAAGCGGGCAAAATCGTTTCAAAATTTCTAATCTCTTTAACA ATCAACTAGCCTATATGTTTTGTGCTCTTTTTTGTGCGGCTTGGGTTATTGCGGAGCGGATTGTTTTTATAG GCTTTCTAAATCAC	1436	TLVISGATRGIGKAIFVRF\$AQSGVNIAFT YNKNVEEANKIEDVEQKYSIKAKAYS NVLEPEQYTEL\$FKQIDADFD\$RVDFFIN AIYGR\$VWGGFAPF\$MRLKPKGLNNIYT ATVLA\$FVGAQEA\$AKRMQK\$GGGAINV LSSTGNLVYMPNYAGH\$GNSKNAVETM VKYAAVDLGEFNIRVNAV\$GGPIDTDA LKAFPDYVEIKEKVEEQ\$PLKRMGNPN DLAGAAYFLCDE\$TQSGWLT\$QTIVVD GGTTFK
HP1014	1437	GCAAAAAGACGCTTGCGGGTTCACTATGAGATCAGCGAGTTTCATGAAGCCTATACCGCATTCGCTAAAAACAA GACCGATACGCTCTATTATTAGGATCTCCCTCTAGGTATTGGCCAGCATTTTAACGACTGCCCTTATGTCAAA TACCCTGATTTGACGCTTTGAAAAGCTTTTGGTGCTTATTATACCAAATGGATTGCAGGAGCGACGATCAGC CGCATCAAGCAACAGTATCAACATTATCAAAAAGCTTAAAGCAATAAGAGCGTTGAAACCATCAAGAGCCTATA TTGAATAGCATCGACTCTTATAACACCTTTGATCAATACCTCTATAACTTATGGGATAGCTCTTCTGTTTATCATAGCA AATGGGTGCGTCTTAGCCCTAGCTAATTTATTTGATGCGAGATGAAGAGAAACCCCATTTTATCGCTATGGATG CCGAAACCCCAAGTGAGCATATTTTGCCACAAACGCCCAAGAGGCGAGTCAATGGAACGCGGATTTGACAAAGA AAAAAGAGAAGAAATGGGTAATAATATCGGAAATTTAACCTTTTAAAGCGTAAAGAACGCGCATGCTTTAAACGG GGATTTTGATGAAAAAGAAAAATTTATGGAGGCAAGACACGAGCAAGTATTAGCTGTTATGACATCACTAAAGA ATTGTATAGCAATTATAGGAAGTGGAAATGAGAAAGTCCCTCCAAGAGCGGATACAAATCTTTGTATAACACTATCAGGCC TGTTTTACACATAGAGGGCAAGAAAGATGATTTTGAAGATGATTTTGATCT	1438	KKDACGFIYEISEFMKAYTALLKQDRY VYLLRYLPSRYWASILTTALYVKYPDFD ALKKLLSVYYQTW\$IAGGTTRIKQTSIN IKNVKS\$NKS\$VETIKELIN\$IDSYN\$T\$FQ YLYNLWDSSSVYH\$K\$WVRPVLALANY FMADEEKPHFIAMD\$AETQVEHILPQTP KRG\$QW\$NADFDKEKREEW\$N\$NIANLT LLKRRKNAHALNGD\$FDEKRIYGGKDT SKVISCYDITKELYSNYR\$KWN\$EKSQ RYKSLYNTITPVLHIEGQEDDFEDFD

HP0047	1439	AAAAGAAATGGATTGTTGCAATTTGATGAAGACGCCCTAAATTTGAAGCTAGTGGGAATATTGCGTGAGCACGGGATA GTTTTGTCAATCAGCCCTTAATTTTAAATGGGGCGATATAGGCAAGCTTTGCGTTTGGGAGTGCGAATGATGTG AGCGTGCAAGGGCGCAACCTTTGATTTGAATATGGGTTTATTTAGAAGAAGGCTTAGAAATTTCTCTTTTAAAA CAAATTTTACAATCCATACAAAAAGAAATGTTTAAAGCCCAACCTGAAACTCTCTCCCTAGACACTAAAGTCGTGCCA AAGGGAGCGTGGATAAGCTTTTATCAACACAACTGCAATGGTAAATCATCAAGCCAGGGATTTCTTCGTACCAT TTACAACAAAGGGCAAGCCATTATCCTAAGCGACACTATCGCCAATCATGGGCAAGCTTATTGCGATGCGTAATGA AATCAAGCTTAAACGAATCTAGAAAGCGATTGCCAATGCTCTATCCCTTATTAAACCCCTATTTTAAAGCGATCTC AAAATTGATGCTTTAAGAGATCGCACTAGGGGGGTTAGCGAGCGTCTGAACGAATGGCGAACAGCTCTAGAG TGAATTCGTTATAGAAGAAAGAAATCCCTTAAAGAAAGAAACGAAAGGATTTGTGAGATTTTAGGGTTAGAAC CCTACGCGCTAGCCCAATGAGGGGTGTTGTTTAGCGCTCAATCAAAAAGACGCCCTAAAGCCTTAGAAAATTTTA AAAAGTAACGAAAGCTAAACCGCTTGGCGTATTGGCAAGTGTGTTGAAACCCCTATCTAGCGTGGTTTAAAG AACGCATGGGTTTGAAGGATTTTAGAGGTGCCAGAGGCGCAATATTGCGCTAGGATTTGTTAAACACGCCGCTCAT TTTTAAATCGTTTAAAGCCTGCCCTAAATAATGGTTAGAGTCCGCTTAAGCTAAGTCTAACTACTATATACTCAAGGCA TTTGAGAAAAAACTT	1440	KEWIVAFDEDAPKFEASGEYCVSTDSF VITPLIFNGGDIGKLCVCGSANDVSVQ GGEPLYLNMGFIEEGLEISLLKQILQSI QKELFKANLKLKLSLDTKWVPGGSVDKL FINTTICGKIIKPGISSYHLQGGQAIIISD TIANHGASLFAMRNEIKLKTNLESDCQL LYPLLKPLFLSDLKIDALRDATRGGLAS VLNEWANSSRVKIVIEEEKIPLKEETKGI CEILGLEPYALANEGVFLALNQKDAP KALEILKSNEKAKNAACVIGKVFENPYPS VVLKNAWGFERILEVPEGELLPRIC
HP0047	1441	CTTGAATTTGCTCAGCCAAATCCCTAAAGATTAGGCGTGTGCAAGGATTGCTTGAGAGAAATCAGGGATAAAAACT CCCCCTATTTTCAATACGCTTCAATTTCTGCGCAAGTGTGGGCGAGATACAGCCTTTTAAACGCTTTGCCCTATG ACAGAGAAAACTCCGCCCTAAACCCCTCAAACTCTGCGATTTTGTGCTTCTATCTATCAAGACCCCAACCAATAAGC GCTTCCACATTCAGGCATCAGCTGCAAAAGTGCGGTATCGCGCTCAATTACAAGCGATTCAAAACGATGACGCT CTTTGAATGCGCTAAGACATTCAAAAGGGTAAATCATCGCTCTTAAAGTTTGGGAGGCTTTGCTCTCTTTGTGC GATGGAAGGAATTTCAAACCATAGAAAGATTACGGCTTTTAAAAAACCGCCCTAAAGCCTTTTCGCACTCATGTTT AAAGATTTGAACACAGCAACAGCATGCGTTTGTGAACGCGTTAGAATGCGAGAGCTTAAATTTCTACAAGCGCCCT CATTCTTTAGCGCGTAAAAAACCTGATATAAAATAGCCCCCAATATCGCTAAAAAACTCCCCCTTTTATGGCGTGATT TTGCCCTATACCCCTTTGCATGCTTTATTGCTGGATTATTGGATTCCCTATTGTTTCACGAGCGCGGAATTTCAAGCT CCTCCCTTTAGCGAGCGATGAGGCTGAGATTGACGCTTGAAGTTTCAATTTTGAATTTAAGCTACGCAACACCGC GCTATCATCCATAGGATTGATGACAGCATCGTGAGCATGTGGATAATGCCATTGCCCCCATGCGTTTGGCTAGGG GTTTGGCCCCCTTACCTCACCTTGCCTAACGCTCTAATGTTGCGCAAAAGATTTAGCGCTTGGAGCGCA CAAAAGGGCATTTAGCTTATTGGATAGCGGAACTTCCATTCTTTACTCTCGCCTTTTGTGGGATTTGAGCGTT TTGAAAAATGAAAA	1442	LNLSSQIPKDLGVCKDCLREIRDKNSPY FHYAFNSCAKCGARYSLNLALPYDRE NSALKPFKLCDFCASIYQDPTNKRFIG GISCKKCGIALNYKRFKNDDALLECAK DIQKGKIALKGLGGFALLCDGRNFQTI ERLRLKNRPLKPFALMFKDLNTAKQH AFLNALECESLISTSAPIILLARKKPDIKL APNIAKNSPFYGVILPYTPLHALLDLD FPIVFTSANFSSPLASDEAEIDALSFIF DFKLTHNRAIHRIDDSIVQHVDNAIRPM RLARGFAPLYLTLPKRSNGSPKKILALG AQQKGHSLLDSGTISILLSPFCGDL VLENEKHFKETLNFLLKTYDFKPTILAC DKHQNYTTTQMAFDENTPLLLQVQHWH AHFLASVLDALLQDPLHNPFIGIWD GSGAYENKIYGAEFCVGDLERIEETAR FEEFWLLGGQKAIKEPRRLVLEIALKHQ LNKLLKRQVKHFKEDLEIFQQMHDKK IQSIATNSIGRLFDIVAFSLDTGTISFEA ESGQVLENIALQSDEIAFYPPFEIKNSV CLKEFYQAFKEDLGVLEPERIAKKFFN SLVEIITALIVPFKEHVVCSSGGVFCNQ LLCEQLAKRLRGLKRQYFFHKKHFPND SSIPIGOAI MAYENPTIUKKG

HP0045	1451	AGGTGTTCAAGACAGCAAAAAGACGCTTGGGGTTCATCTATGAGATCAGCGAGTTTCATGAAGCCTATACCGCA TTGCTAAAAAACAAGACCGATACGCTATTATTAGGTATCTCCCTCTAGTATTGGCCAGCATTTAACGACT GCCCTTTATGTCAATACCTGATTTGACGCTTTGAAAAGCTTTTGGTGCTTTATTATTACCAACTTGGATTGCAG GAGCACGATCAGCGCATCAAGCAACCAAGTATCAACATTATCAAAAAGCTTTAAAAGCAATAAGAGCGTTGAAACG ATCAAGAGCTTATATTGAATAGCATGACTCTTATAACACCTTTGATCAATACCTCTATACTTATGGGATAGCTCTT CTGTTTATCATAGCAATGGTGCTGCTGCTTAGCCCTAGCTAATTTATTCATGGCAGATGAAGAGAAACCCCAT TTATCGCTATGGATGCCGAAACCCCAAGTGAGCATATTTGCCACAAACGCCCAAGAGGCGAGTCAATGGAAACGC GGATTTTGACAAAGAAAAAGAGAAAGATGGGTAAATAATATCGGAATTTAACCTTTTAAAGCGTAAAGAAACGC GCATGCTTTAAAGGGGATTTGATGAAAAAGAAAAATTTATGGAGGCAAGACACGAGCAAGATGATTAGC	1452	VFKDSKKDACGFIYEISEFMKAYTALK KQDRVYLLRYLPSRYWASILTALYV KYPDFDALKKLLVSYYYQTWAGGTITR IKQTSINIKNVKSNSKSVETIKELINSIDS YNTFDQYLNLWDSSSVYHSHKWRPV LALANYFMADEEKPHFIAMDAETQVEH ILPQTPKRGSQWNADFDKEKREEWVN NIANLTLKRKNAHALNGDFDEKRKIY GGKDTSKVIS
HP0601	1453	CAGTGGCTAAAGCAATGGCGATTTCAGTAGGTAGCAAGTGTAGCCGATCTCAAAAACCTTCTCAAGGAGCAA TTGGCTCAACAAAGCTCAAAAATGAAGATTTCAATCTGAAAAAATCTGAACCTATACCAATCCGTTAAGAAATAGTG TAAATAAAACCTAGTGGTAATGGTTATCTGGAATAGAGGCCACAGCTCTGCCAAAAATTTTTCGGATATCAAGA AAGAAATGAATGAGAAATTTAAAAATTTCAATAACAATAATAATGGAATCAAAAACAGACAGAACCCATTTATGCTAA AGTTAATAAAAGAAACAGGACAAGTAGCTAGCCCTGAAGAACCCATTTATCTCAAGTTGCTAAAAGGTAATGC AAAAATTGACCGACTCAATCAATAGCAAGTGTTGGTGTTGAGGCAAGCAGCGGCTTCCCTTTGAAAAGG CATGATAAAGTTGATGATCTCAGTAAGTAGGCTTTCAGTAGCCTGAACCCATTTACGCTACGATGATGATCTC GGCGACCTTTCCCTTTGAAAAGGCATGATAAAGTTGATGATCTCAGTAAGTAGGCGATCAAGGAATCAAGAAAT GGCTCAGAAATTGACAATCTCAATCAAGCGGTATCAGAAGCTAAAGCAGGTTTTTTGGCAACCTAGAGCAACGA TAGACAAGCTCAAGATTTCTACAAAAAAGAAATGTTATGAATCTATATGTTGAAAGTGCAAAAAAAGTGCCTGCTAGTTT GTCAGCGAAATTTGGACAATTTATGCTATTAAACAGCCACACGCTAATAGCAATATCCAAATGGAGCAATCAATGA AAAAGCGACCGGTATGCTAACGCAAAAAACCCGTAGTGCTTAAGCTCGTGAATGATAAGATAGTTGCGCATATG TGGGAAGCGTTTCTTTGTCAGAGTATGATAAAATTTGGCTTCAACCAAGAAATATGAAGATTATTCTGATTCTGTTCA AGTTTCCACCAA	1454	VAKAMGDFSRVEQVLADLKNFSKEQL AQQAQKNEDFNTGKNSELYQSVKNSV NIKTLVGNGLSGIEATALAKNFSDIKKE NEKFNFNNNNGLKNSTEPYAKVVK KKTQVASPEEPIYTQVAKVNAKIDR LNQIASGLGGVQQAAGFPLKRHDKVD DLSKVGLSASPEPIYATIDDLGGPFLK RHDKVDDLKSVGRSRNQELAQKIDNL NQAVSEAKAGFFGNLEQTIDKLKDKSTK KNVMNLVYESAKKVPASLSAKLDNYAI NSHTRINSIQNGAINEKATGMLTQKN PEWLKLVNDKIVAHNVGSVSLSEYDKI GFNQKNMKDYSDSKFSTKLNNAVKDI KSGFTHLANAFSTGYCYCLARENAEH GKNVNTKGGFQKS
HP0601	1455	ACCAGCATAACCGAGTGAGTGGAATCCCGGCAAAACTCATTGAAATGCTTTATGAAGGATTTTGAGATTTCTT CGCAAGCCAAACGCTGTATTGAAAATGAAGACATTGAAAAAAGATTTATTATTAATAGGTTACGGATATTTTCAC GGAATTTGTAATATTTAGATTATGAAAAAGGGGGAGTGCGGTGATCTTACGGCTTATACACCCATCAAA TCAAGTTTAAAGCGAGGCCAATGTGAAAATGATCGGAGTAAGATTGATTGTTGTTGAATGTGGCTAGAGGGTTA TTAGAAGCATGGAGGAAATCCATTGAGTAACCTCGCTAACATTTATTAGATTCCTTAAATCGCTCTGTTAA AAAGATTCTAAGCAAGCCTTTTATTGATAGAGCGCTTCTTTAGAGCAATAAAAGTTTGGAATTTAGATCGCTTT TAAGCCTTAAGGAATGATAGCCCAAGCATTAAGATTATGAAAAAGAAAAAGAACTGCAATTACAAATGCATA AGGCTAAGAGATTCAAAAATTTTGCTTAAGATT	1456	QHNRVSVESPAKLIEMLYEGILRFSSQ AKRCIENEDIEKKIYINRVTDIFTLLNI LDYEKGGEVAVYLTGLYTHQIKVLTQA NVENDASKIDLVLNVARGLLEAWREIH SDELA
HP0601	1457	ATTACTTTTAAAGCCCTATTATTAGGATTGAGCATATTAAAGGAGTGGCTTTGGAAAAAATTGATTCCTATTTCAG CCGATTAATTAGCCAAACCAATTCGCCCATGGCTGGATATGGTTTAGTGAATCCTTATTGTTGAGGGAATACAG CTTTGTGATACCCAAATACATAGAAATTAAGTCTAGAAATAGATTCTCATCCAAAGTGAGGTTGATTCGCTGCTCGT GTTGCAAAAAAATTAGAGATTCTATGGTTAATTTCTAGCCCTTAGIGTTAATTCCAAAATGGCTTTGGCGCT CAAGTGGCGCTTCTATGATGGATTATCCGGATTTGGCTTTAGGATCCTTAAAGCCTTTGATTCAAGAAAGA GAACGAGCTTAAAGGTTTTAGCATGAATTCGCTCTTACAGGGGAGGACAGGGGCTATCTCTATCGCTAAA GCCTTAGCCATAGAAATTAGAAAGCAAGCATAGAGCTATTATTAGGCTCCACTTACGGCAAGATAAAGAAATG GTTGAAAAATAGCCCTTATTAGCGAACGCTATTATTCAACACGCAAGCGTGCTCAATAAAGCTTTTAAAAAA ATAGGCTCTTTATCTTGCAAGCTAAAGCCGCTTTAAGGCTAAAGAGATTTTAAAAAACACAGATCACGCACACC ATTAGCGTGGGGTTTTAGCGCAGGGCGGCAAGTTTTGCAAGCTTGCTCAATAAATACCCCTTTATATCCATGA GCAAAATGCGATTAAAGGCTCTCTCAATCGCTACCTTTCCCTAAAGCTAAGCGGTTTTTCAAGCTATGCTTTAA AGATAAGGAAATCATGTTTTAACCTCTATCCGCTGCAAAACGCTTTTATTGATTGCTAGGACTCGCACGGAAT CAAGCACATTTATTATTAGCGGTTGCAAGGGGCAAAAGCGATCAATGAATTCGCTTTTAAAGCTCCCAACT CACCACCAA	1458	YFLKAPILGFEHINEVRLEKIDSLFSRLIS QTNSPMALDMVLVNPYCLREYSFVPIK YIELLELDSSHKVEYCVVVLQKNLED SMVNFAPLVFNKNGFGAQAVALSMM DYPDFGFRDPLKSFVIERERA

HP0601	1459	GATTTTGTGTAAGCGCCTATTTGGGTTGAAACCATTCATAAATGCGTTTGCAAAAGATTGATGAAATCTTT TTGCGTTTGAATAGCACAGAGAAATCCGTGGTGTCTTTCACGCTGTCATCCCTTGGCTTAAAGAAATACGAA TTTGAAGTGCCTACCCCTTAAATCCTTTAGAATTAGAGGAGCGCAAGCGTTCTAGTCGCTAATATCATGGTC GTTCAAAACCCCATTTGAGCTTTCCACCGTGAATTTATAGCCCTTTAATTTCAATTTGGACAAGCAGCTCATGGGG CAAGTGGTTTGGATTCTAACAAATACCCACACTACCATTTAAGAGAGAAATTTCTAAGCCACACGCGCATGAATGATGC ATAAGCGGTTTCTATGCAAGCGTTTCTTGAAGCTTATGGCGCAATGCATCGGTGTTTTGCAATACAAAGCGAGCG GTTTTCTTATGTTATGAACAAAGCCCATCAAACTTGCAATCTCAATTTTATAGAGCATATCTTACAAATCTACCTCA GGAGTTTATTTATGGAACAAAGCCCATCAAACTTGCAATCTCAATTTTATAGAGCATATCTTACAAATCTACCTCA CCGCTATCCCATGCTTTAGTGGATAGAAATTAAGGTTACAGTTACAGGCAATAAAATTTGCGCTTATAAGAAATACAT TTTAATGAAGACGTTTAAACGGGCTTTCCCTTAATAGCCCATTTCCCGGGCTTTTGCATGAAATCGCCAAACAAATC GCAACGGGAGGTTTTAGCCTTCACTAGCTTGTGGGTTTGACCTGAAATCGCCAAACAAATC	1460	IFDVKAPILGFETIHKMRLCKIDEIFLRN STEENSVSFTLVNPFALFKIYEFVPT PLKILLEGAKSVLVANIMVQTPIELS TVNYLAPLIFNLDKQMGQVVDLSNKY PHYHLRENILSHTHE
HP0601	1461	CCGATAAGGGATTAAAGGTTTCAAGACAGCAAAAGACGCTTGGGGTTTCATCTATGAGATCAGCGAGTTC ATGAAAGCCTATACCGCATTTGCTAAACAAAGACCGATACGCTATTTATGAGGTATCTCCCTCTAGGTATTGG GCCAGCATTTAACGACTGCCCTTTATGTCAATACCTGATTTGACGCTTGAAAGAGCTTTTGGTGTCTTATTATT ACCAACTTGGATTGAGGAGGCGGATCAGCGCATCAAGCAACAGTATCAACATTTCAAAACGTTTAAAGC AATAAGAGCGTTGAAACCATCAAGAGCTTATATTGAATAGCATCGACTCTTAAACACCTTTGATCAATACCTCTATA ACTTATGGGATAGCTCTTCTGTTTATCATAGCAAAATGGTGGTCTGCTTACCCCTAGCTAATTTTATGCGCAG ATGAAGAGAAACCCCATTTTATCGCTATGGATGCCGAAACCCAGTGGAGCATATTTGCCACAAACGCCCAAGA GGCAGTCAATGGAACGGGATTTGACAAAGAAAGAGAGAAATTTGATGAAAGAGAAATTTATGGAGGCAAGACACGAG AAGCGTAAAGAAACGGCGCATGCTTTAAACGGGATTTGATGAAAGAGAAATTTATGGAGGCAAGTCCCTCCAAGA CAAGTGATTAGCTGTTATGACATCACTAAAGAAATTTATAGCAATTTAGGAAGTGAATGAGAAAGTCCCTCAAGA GCGATACAAATCTTTGTATAACACTATCACGCTGTTTACACATAGAGGGCAAGAGATGATTTTGAAGATGATTT TGATCTAGATGATTAAAGATTGCCAAGCATCAAAACAAAGAGGTGATCAATGCCCTAAAGAGAGCTATTAAAGA TGTCAAAGAAAGGATTTTAAAGACTTCTTAAAGAAAGCCCAACAGCAGCCCTATTGTTTTCTATACAGATAATGA TTGTGATGGCA	1462	DKGLKVKFKDSKDACGFIYESEFMK AYTALLKKQDRYVYLLRYLPSRYWASI LTTALYVKYPDFDALKKL.VSYYQJWI AGGTTTRIKQTSINIKNVKSNSKSVETIKE LILNSIDSYNTFDQYLNLWDSSSVYHS KWVRPVALANYFMADEEKPHFIAMD AETQVEHILPQTPKRGSGQWNADFKE KREEWNNIANLTLLKRIKNAHALNGD FDEKRIYGGKDTSKVISCYDITKELYS NYRKWNEKSLOERYKSI.YNTITPVLHI EGQEDDFEDFDLE
HP1259	1463	TGCGCGTGTAGAAACGATTGTTGCTTTAAGAGAGTATCGTAAAGTTTGGAAAGAAAGCGTGGGTTTGTGCCGACT ATGGGGGCTTTACACAAAGGCGCATCAAGCTTGATAGAAAGAGTTTGAAGAAATTTCCACACGATAGTGAGCGT TTTTGTCAATCCACGCAATTTGGGGCTAACGAAGATTTAACGCTTACCCTCGCCCTTTAGAAAGGATTTGGCTTT ATGTGAAAAATTAGGCGTTAATCGGTGTTTGTGCTTAAATTTGGCGAAATGTATCCCTATGAAGCAGAGCAACGCC TGAAACTCTATGCTCCTAAATTTTATCTAGCTCTTAGAGGGAGCCATGCGTAAAGGGCATTTTGTGAGGTTGTTT AGATCGTGTAAATAATGTTTCTATCTGTTAATCCCACTAGAGCGTATTTTGGCAAAAGGACGCCCAACAGCTTTTAA TCATTGAGCATTTAGTCAAAAGATTGCTTTTACACATTGAAATAGCGCCATCGGAGATCGTGGCGATGACGATAATT TGCTTTAAGCTCTAGGAATGTATTGTAATGCCACACAAAGAACTGAAAGAACTGAAATTTTAGAAACC AATCCAGCAGGCGCATAGATAAGGGCGAAAGCGTGGGAAAGCTGAAAGAACTGAAATTTTAGAAACC TTGGAAGTGGATTATTGGAATGTTGTAACCAAGCTAGAGCCTTTAACAATCATAGAGCCAACTAACAGCTCAT TTGGTGGCGGCTCGTGGTAAACAGGCTTTTAGATAATTTATGGGTGATGTTTGGAAATTTTGTGGCGACCCCT TGAAAGATTGAACCTCCGTTCCACCGTGAAGGGTGGTAT	1464	RVLETIVALREYRKSLSEESVGFVPTMG ALHKGHQSILERSLKENSHITVSFVNP TQFGANEDENAYPRPLEKDIALCEKLG VNAVVPKIGEMYPYEAQRLKLYAPK FLSSLEGAMRKGFHDG3WQIVLKMFI LVNPTRAYFGKKDAQQLLIEHLVKDLL LDIEIAPCEIVRDDDNLALSSRNLYNA TORKQALAIKALEKIQDAIDKGEKACE KLKLLGLEILETLEVDY.ECCNHKLEPL TIIPTNTLILVAARVGKTRLLDNLWV

HP1259	1465	ATGGACTAATGGAATAATTTGTTTCAGTCAAGTGGTGAATGGGAAGTATGAAGAAATTAAGAAGACATCAAAAGTGTC AAATAACGCTCAAGAGCTTTTAAACAGGCTAGCACTATTTTAAACACTCTTAATGAAGCATGCCATGGTTGAGTAA TGGTGGTGCAGGCAATGTGGCCGGTGGCAATAGTTTATGGCCGGAATAGATAAAGCGGAGCGGAGCGCATGCGG GATTTTAAATAATGAATCAGCGGATTCAAGACATGATCAAAAACGCTGAATAGCGGTAGAGCAATCCAAAATCGT TACCGCCAACGCGCAAAACAGCACAACTAGACACTGGGAAGCATTCACCCCTATAAAGACGCGCAACTTCGCC CAAAGCATGTTGCTTAACGCTAGAGCGCAAGCGGAGATTTTAAACCGGCTCAAGCAGTGGTGAAGGACTTTGAAA GAATCCCTGCAGGCTTCGTAAAGACTCTTTAGGAGTATGCCATGAAAAGGAGTGGAGCGCAATCTCCGTGGCAC GCCATCTGGCAGGCTTACTTCAACACTTGGGAGCGGCTGGCGTATGTGGAGAAACCGTAACGAATCTAAA AACAGCATCGCTCATTTTGGCGACCAAGCGGAGCGGAATCCATAATGCGCGAAATCTCGCTACACTTAGCGAATTT CAGCGGCCAGTACAAAAGCTAGCGCAACACTATGACAGCATC	1466	WTNGKFVSVKVVNGKYEEIKEDIKVSN NAQELLKQASTILTTLNEACPWLSNGG AGNVAGGNSLWAGIDKDGSGACGIFK NEISAIQDMIKNAEIAVEQSKIVTANAQN QHNLDTGKAFNPYKDNFAQSMFANA RAQAEILNRAQAVVKDFERIPAAAFVKD SLGVCHKEKSGDNLRGTPSGTTSNT WGAGCAYVGETVTNLKNSIAHFQDQA ERIHARNLAYTLANFSGQYKKLGEHY DSI
HP1259	1467	GTTTGGCGGTATCCAACTAGCGGGACTTCATGGCTTAATCTCAGTATGTGAATTTAGCGAATGTGAACAAATTTATTA TAAAGCTAAAATCAACACCTCTAATCTCAATCTTCAATCTGGCTTAAGGACCAATCTCGCCAGAAATAAAGA ATAGGCGGTGATCATAGCGCGCAACATGGCATGGAATTAGCGTGAAGATCCCGACGATCAACACAAATTAATTC TTTGCTAGGCACCTACCTTGCAATACAGAAGGCTTATAGCGTGTATCTCAACTATGTGTTGCTTACTAAAAGCTTAA CTCCTTTTAAACTCCCTTTTAGGGGTTTAACTCTTAACTGACTTTTCTTGTAGCTTTTAAATTTTCCACCAA ACAAAGTTTTTGACTTCAAGGTTAATCACAAAATACTCAAGGCTTTTGTGCAATCTAATAAATAAATTAGCGT TATTCAGGCGATGATTTTAAACCCCAAGCAAGAAACCCCAACATCTTAGCGTTCGCGGCTCCACTAACCAAAA AACGCCCAAGTCAAGGACAAACCCGCTTACATAAGGAACCCCTAAGTTTGTAGGCTTAGGGAACGCTCTTA GAAATTAGCGTTTATCAAAAACACTACCTTAAACCAAGAAAGAAATTTCAAGGTATAATAGTTTCCAAAGCGGTTT GCCACTTTTACACTTCATGGCATGCTCTTATTTGGATTGGCCCATATCTCAACTATGAGCGGTGATGAAATCCTAC AACCAACGCGCTTTAAAGCTCTTAAATGCAACCCCAACCCCTAAACCAAGCACTTCCACTTAAATAAACCAATAATCCCC ATACCTACGATATAATCCTAAGATTGATTGTTAAGGGCGGTTTGGCATCATTTCCATCTGAGGTTTTTAA CCCCTAAGTTGTCTGCAAGCGGTTTGTATAGCCTTATTTTGGCGTTTATACCATTTCCCTTTGTTGCTTTATG	1468	FGGIQLAGTSWLNQYVNLNANVNY KAKINTSNFQFLFNLGLRTNLARNKRIG ADHSAQHGMELGVKIPTINTNYSLG TTLOYRRLYSVYLNYYFAY
HP1259	1469	TCGTGGCCCTAAAGCGGTGGATTTTCCAAGCTTTTGAACGACCGGGTTTCTTACGATCCAGGGTATCTTC TACCGCTGGATGCCAATCTAAGATCAGCTATGTCAATGGCAAAAGCGGAATGTATTACAGAGGCGATAGGATAG AAGATTTAGTCCCAATACAAATATGTAGATGTGTCAATTAATCTCTCACAGGGGAATTAACCAAAATCAAGATG AAAGCTTGAATTTGAATTTGAATTTGGCCACAGGAGCTTTGTGCATGAGAGCTTACTCAACATGTTTTCAGCCTTCC CTAGCAACGCCACCTATGGCGAACTCTCTAGCGGAGTGTCTATCTTATCCACCTTTATCCACGCGCAACAAAC ATGCACACTGAAGAAGATTACCAAACTATGGCCAGAAAGGATTGTGCTAAATCCCCACGCTTGCGGCTATTGCTA TCGTAATGAAGT	1470	RGPKAVDKSKLFFETTFSSYDPGYSST AGCQSKISYVNGKKGELYYRGHRIEDL VAKYKYVDVCKLLLTGELPKNQDESLE FELELRHRSFVHESLLNMFSAFPPNAH PMAKLSGVSILSTLYSTHQNMTHEED YQTMARRIVAKIPTLAAICYRNE
HP1259	1471	CCCTTTTAGGCACAGGAGCAGTAACGCTGGGAGCTTGGATGGCGGAATATATAAACCGGTTTAAACGGATGG GAGCTTGAAATGTTAGGAGCGACCACTTTTGAAGAATACCGAGCGGTGTTTGAATAAGAGCAAGGCTTTTAAATAGGC GTTTTAGTCATATAAAGTTGAAGAGCTTCTAAGAGCGGTGTTACTTGAATTTTAAATAAGATCGCTCCCTTTATGA AGAACACCAAGGTGCGTTATGATGAGAGCGGTGTTAAGGCATGCGTGGATTAAACGAGTGAATACATGCATGATA AATCTTGGCGGATAAAGCGATTGAATTTATGATGAGGTGGATCGAGGAAATAATCAGCCCTAAATAAGGCGCAA AAAATCGCGCTTATGATGTGAAGAAGAACGCTCGCTCTAAGCTTAAATCCCTAAATGCGTTGAGCAGCGGACAA AAAAGCCCTTTTAAAGGAATTTGGAATAATCGCTTAAATAAGATTGTTGCCCAAGCAGAGCGATCAGTCTTGTGAG CAATGCGATTAAATCCAGCATTCGCGGCTTCTGCAAAAATAAGCCTGTGGGAGCTTTTATTCGTGGGCGCTA GTGGGTGGGAAACAGAAATGGCTAAGAAATGGCTTGAATTTGAATTTGAACGCTTGACATGAGC GAATACAAAGAGCCCATAGCGTGGCAAACTCATCGGAGTC	1472	LLGTGSSNAGSLDAANILKPVLTGSL KCLGATTTFEYRSVFEKDKAFNRRFSV IKVEEPSKEACYLILKKIAPLYEEHHQV RYDES VFACVDLTSDYMHDKFLPDK AIELDEVGSRKKISPKKKGKIGVDDVK ETLALKLIPKMRLLSSDKKALLRNLEKS LKNKIFAQAEASISLVNAIKIQHCGLSAK NKPVGSLFVGPVGKTELAKELALN LNLHFERFDMSEYKEAHSVAKLIGS

HP1259	1473	TGAGAAGAAAGCATGCAAAAGAGAAATACCAAGCCCTTGCCATTTTGGCTTTGCAGGGCATATTGATGTCGTCGCCCTC CTGGAAATCATTTGGCAAGCGATCCTTTTAAACCCGTTATTAAAGAGGGGTTTTTATACGGCCGTGGGCGCAAGAC ATGAAAGGAGGGCTGGGGGCTTTTGAAGCGGAGTTTAAATTTAAACCTAAACCCCTTTTGGCTTTCTATTTTA CTCACAAGCGGATGAAGAAGGGCCAGGATTTTGGCACTAGGCTTATGTTAGAAAACCTCAAAGAAAAGATTGCT GCCTCATATGGCGATTGTGCTGAACCCACTTGGAAAAGTCTTAGCGGATAGCATCAAAATTTGGCCGAAGAGGC TCCATTATGGCAAACTCATTTTAAAGGCGTTCAAGGGCATGTGGCTTACCGCAAAATGCCAAAACCCCTATTGAT ACGCTCGCTTGGCTTTCCTCTCATTTAGGAGTTAATTTAGACAATGGCGATGAATATTTTGACCCCTTCAAAATTA GTCATCACCAACTTGATGCGAGGTTAGGAGCGAATAATATTACCCGCAAGCGTAGAAATCATCTTTAA	1474	AEEKHAKENTKPLHFCFAGHIDVPPG NHWQSDPFKPVKEGFLYGRGAQDMK GGVGAFLSASLNFNPKTPFLLSILLTSD EEGPGIFGTRLMLEKLEKEDLLPHMAIV AEPTCEKVLGDSIKIGRGRGSINGKLILK GVQGHVAYPQKQCQNPIDTLASVLPIS GVNLNGDEYFDPISKI.VITNLHAGLGA NNITPASVEIIF
HP1259	1475	GAGCGAGTGTGTGAGCGGTTACTTCTGTAGGCTTAGGGGAGCCCTTAAACATTCAGTTTCAGCTAATGACAAA CGGATGCAGGATAATTTAGTGAAGCGTGATTGAAAACAGACCAATAAAAAGGTGCGTATTTTAGAAATCAAACCTTTA AAATCTAGCCAGGATTTAAAATGTCGTTATTGAAGATCCGGACACTAAATACAATATCCCGCTTGTGGTGAGTAAG GATGTAATTTAATCATAGGGCTTAGCAACATATCTTTAGCAATAAAGGGATGATGTGCAATTAGTTCGAGAAACC AATCAAAAAGTTCAAGCTCTTAACGCCACCAACAAATAGCGGAAATGAACCGTATTTTAAATGAATACCCGGCT GATTATGCGATAGATTGCCCTCTACTAACGCTGCAATAAGGATAAAATCCTTTATATTGCTCTGATCCCATGTGC CCACATTGCCAAAAGAGCTCACTAACTTAGGGATCATTTAAAGAAAACACCGTGAGAAATGGTGGTGGGGTG GCTTGGGGTCAATTCAGCTAAAAGCGGCTTAAATCCAAGAGAAATGGCGAAAGCTAGGGCTAGGGGAGCGGAGC GTGGAAGATAAGATCTCTATTCTTGAAAAGATTATTCCACCCAATACGATATTAAACGCTCAAAAAGAGCCTGAA	1476	ASVLSALLVGLGAAPKHSVSANDKRM QDNLVSVIEKQTNKKVIRILEIKPLKSSQ DLKMVIEDPDTKYNIPLVYSKDGNIIG LSNIFFSNKSDDVQLVAETNQKVQALN ATQNSAKLNAIFNEIPADYAIELPSTN AANKDKILYVSDPMCPHCQKELTKLR DHLKENTVRMVVVGW.GVNSAKKAAL IQEEMAKARARGASVEDKISILEKIYST QYDINAQKEPE
HP1259	1477	AGACGAGTTGGCCAGACAGGAATTGAAAATCCAGGCTTACCCAGCGCAAGAAATTAAGCGAGTTGATCAGAGAT GGGGCTGTGAGGTTGCAAACTTCTGCCATTCCTTATCCTACTACTTGGATATTTAGGGAATAAAACAGCAACTCTT TTGCGTGAAAGCCTGAAAACAAATGCACAACCATCACAAACGCGCAACCCGCAACAAACGAGCCATCAAA CCAAGCCTTAGCCAAATTTAGGCAATCTCTAGGATTTTAGGAAAACCTATTGGATCTATCCCAACAATACGCTAGTCA GGGTGTCATTAAAGCCTTTGGTGGTGGATGTGGGAAGAAACAAATCGGTATCACGGATAGCATGCTCTTGGTGGCT CAAAACATCGTTTTAGCTTTAGGCAAGTGGATTGAGCAAAATCCAAACAAATTAACGAACAGCTATACGAAAT ATTATGAAAGTCATGCTTTAGGCGGGCGGACTAATGGGCGTATAATGGCGTGAATGTGGCGGACATTGCCA CGGGCATGCAAAATTTTCTCGCAACGGGCTTATAGGGGCTAATCTACGGTTAGCGAGCTGAATGCTTTGATT AAGAGCGGATTTCTTGGATCGTGAGACTTTGGGTTAGGAGTTTTATTGAAAAAATATCTGTAGCGGTGCATC GCTTGTTTTAGTGGGAATCAGCTTATCTATAAGAAAGGCTAGACAGAACCAATCAATCAATACGGTATTAGG TCAGTTTGAATCTTGGCTAGTTCTCTTATAAGATTTCTTATATCCCTAACCTCTTTTCCGCTCAAGGATTACAGTCA GCGAGCATGAACGGCTTTGGGCTAAGATGGGCTATAAACAAATTTTACCCCATAGAAATGTTGGCTTAAGGTA TTACGGGTTTTTGGATTATGGCTATGCGAACTTTGGCGATACGAAATTTAAAGTGGGGCGCAATCTTGTACTTATGG GGTAGGAACGGATTTTT	1478	TSLARQELKNPGFTQAQELRQLRDGA VRLQTSAPLSYYLDILGNKTATLLRESL KNNAQSPQNAQPPQNGPSNQALA NLEQSLGILKLLDLQQYASQGVKPL VVDVGEQIGITDSMLLVAQNIVLALGQ VDLSKIQQNNNEQLYELNIMKVMLLGAG GTNGAYNGVSVGDIATGMQNFSSQTG LIGANSTVSELNALIKSGISLDRETLGL SFIENICSGASSCFSGVQLYKKGLOD TINIINTVLQFESSASSLYKISYIPNLF LKDYQSASMNGFGAKMGYKQFFTHKK NVGLRYYGFLDYGANFGDTNLKVGA NLVTVGVGTDFLYNVYERSRRRERTTI GLFFFGAQI
HP1259	1479	CTATCAATCACATGATTATGATAGGCGAGGCGTTTGGGGTGGCTTTTGCAATAAAATAGGGCGGATGAAAGAA CTCATTAAATGTATAATCAAGGCAATGGTCTGGTGGGATTTTAGTGGAATCAAAATGTCGTGCCATAAGATGGGGT GGTGGTGAAATCTTTGATAGAGACGCTACGCACACCGATCGCTTCTATTTTGTGCGCGCTTATAATATAGATAT TCAGCCGGTATTCAATGATTTAATGACGATTATTCGCATTATACAGCGACCTATTATCCGAGTATCCGCTCTCAAATC ACCGATAACGCGCAAAACGATATTTAGAATGCACGCAAGCCCAAGCGAGTTTGTGCGAAGAGGTGATTAGAAACCA CCCGGAAAGTTATTTGGTCCATAGGCGTTTAAAGCACCCACCTGAGATTTATCAAGATAGGGTTTTTGT AATCAAAAATTAAGCTAAGCCTTATTTTAAAGAAACTTTTATTGATGTGTAAGAAACGCTTTTGTAGTATTTTGCATT CCATCATTCATGAGCGGGGAGTTGATTCTCCAAAATCTTTTAAACTCAAAACCGCTTTTCTAAATGCG GTTTCTGGGCTTCTACCGAGCTCAATAAAAATGCAAAATGTGCAAGCTGGCCAAACGAGCGTAAGTGAGTCTTT AGCCCTAAATAAATGGTGCAATAGGCTTTAGAAATAGCGTTTGAAGCATACATGCGCAATTTTCTTCAATAGGGGT ATTATCCAATTTA	1480	INHMIMSRREAFGVRFVNKIGAMKELIK MYNQGNGLVGILVDQN.VPKDGVVVK FFDRDATHHTIASILSRRYNIQIPVFD FNDDYSHYTATYPSIRSQITDNAQNDI LECTQAQASLCEEVIRNHPESYFWFHR RFKSTHPEIYQR

HP1259	1481	TAGCAGTAGTATGGGGTAATGGCAGTAGCACGCAAAACACCGGACACCGCAACCGGCGTAACCGATCACC ACTACCTATAATAAACAAGCCACCGTCAAAATTTGACATCACCAATAACGCTGAACAGCTGTTAAATCAAGCGGCA AACATCATGCAAGTCCCTTAATACGCAATGCCCTTTAGTCGTTCCACGAATAACGAACAACACTCCAGGGGGTGGTCA ACCATGGGTTTAAGCACATCCGGGAATGCGTGAGCATCTTCCAAACAAGAAATTTAGCCAGTTACTAGCATGATCA AAAACGCCCAAGAAATAATCGCGCAAGCAAAATCGTTAGTGAACGCGCAAAATCAAAACAACCTTGGATACCTGGA AAACCATTTCAACCCCTTACACGGACCGCAGCTTTCGCAAGCATGCTCAAAACGCTCAAGCGCAAGCAGAGATGTT CAATTTAGCGCAACAAGTGAAGAACTTGGAGTCATGAAGAAACAAACAATAATGTTAACGAGAAATTAGCAGGATT TGGGAAGAAAGTAATGACCAATTTTGTAGCGCCTTTTGGCAAGCTGCAAGATGGTGGCACATTGCCCTAATG CAGGGTTACTTCAACACTGGG	1482	SSSNGGNGSSQTQTATTTQDGVTTTT YNNKA'VKFDITNNAEQLLNQAANIM QVLNTQCPLVRSTNNENTPGGGQPW GLSTSGNACSIFQEQFSQVTSMIKNAQ EIIAQSKIVSENAQNQNLDTGKPFNPY TDASFAQSMKNAQQAQAEFMNLSEQV KKNLEVMKNNNNVNEKLAGFGKEEVM TNFVSAFLASCKDGGTLPNAGVTSNT W
HP1259	1483	TGGCTAAAGAGGGGTTTAAACCTTTGTGAGCATCTATTCTACITTTTGCAGAGGGCTTATGATTTCTATTGTGCATG ACGCTTGATTTCTAGCTTGCCGATTAAATTAGCCATTGACAGGGCTGGGATTTGGGCGAAGATGGCGAGACGCA CCAAGGGCTTTTAGACGTGCTGATTTGCGCTCTATCCCTAACATGGTCATTTTGCCTCCACGAGACAATGAGACTTT AAAAACGCCGTGCGTTTGGCAATGAACACAGATTCAAGCCCTTGGCGTTCCGATACCTAGGGGGTCTGTTGCG TTAAAGAGGGGTTTGGAGCCTAGCGGTTTGTGTTAGGCCAAAGCGAATTTGTTGAAAAAAGAGGGC	1484	AKEGFKPFVSIYSTFLORAYDSIVHDAC ISSLPKLAIDRAGIVGEDGETHQGLLDV SYLRSIPNMVIFAPRDNETLKNVRFAN EHDSSPCAFRYPRGSFALKEGVFEPS GFVLGQSELLKKEG
HP1259	1485	TGAGTGCTAATCATTCGCTTGAGCGGGGGTATGGAGCGCTCAGCGATTAAAGAAATTTCAAGAAATTTTAGGG GTGTGATCCCTTCAAAAACGAAGAAATTTAGAGCCGATTTGAAAGATATGCTTTAAAGCGTGTGATTGTAGGG CCTTATGAGCATCATTTAATGAATCAGCTGGCTGAAGCCTTGTGTAAGTGGTGCATCCCTTTGAATGAACA TGCTTATTGGATTAGAAATTTAGAGCAAACTTTAAAAAATCCCTAACAGCCTGTTTCTATAAGTGGCGCTCT AATGTAACGGGAATTTACGCCCTTAAAGAAAGTTTCACTATTGTGCAAGAAATATAAGGCCGCTTTGGCTTTGGAT TTAGCGAATTTTAGTGCGCATGCTAACCTAAAGATTGCGAATACCAACCGGTTTTTATGCGCCTCATAAGCTTTTA GGGGCATTTGGAGGTGCGGCTTTTAGGCAATTTCTAAAGATTGATTGACACGCGAGATCGCCCCGAGTTTTAGCGG CAGGGGGCGTGATTAAATACGCTAATCGCACCGCAATTTA	1486	SANHCVLSAGYGASSAIKFKQEILGVCI PSKTKKNLEPYLKDMLKRVIVGPYEH HSNEISWREGLCCEVRIPLNEHGLDL EILEQTLKSPNSLVSIASAASNVGTILTP LKEVSSLCKKYKAALDLANFSAHAN PKDCEYQTGYAPHKLLGGIGCGLL GISKDLDTQIAPSFSAAGGVIKYANRTR HEF
HP1259	1487	AATACCTTGTCATCAAGAAAGGGTGTGAATGGTTTAAACGGCTAAACCTACCAAAAAGCCCAACAAATCAA AGAGCTGCTTTTAAACATTACCCCAACCAACCCGAAATTCGCCATAAAAACCCCTATGAATTTATGTTGGCGAC CATTTTAAGCGCTCAATGCACGGACGCTAGAGTGAATCAAAATAACGCCCAAGTTATTGAAAAATACCCGAGCGTGA ACGATTTAGCCCTCGCTCTTGAAGAAAGTTAAAGAGATCATTAATCCGTTTCTTATTTTAAACAATAAAGCAAGCA TTTAATCAGTATGGCGCAAAAAGTGTAGGATTTAAAGGGCTTATCCCTCTACGCCAAAAGAAATGATGAGTTT AGATGGCGTGGGCAAAAACCGCTAATGTGTGCTTTCAGTGCTTTGATGCAAAATGTATAGCCTAGATACCC ATGTGTTCCGTGCAACACCGCTTAGGCTTAAGCAATGCTAAAGATCCCATTAACCGAAGAAAGAACTCAGCGAT CTGTTTAAAGACAACCTGTCCAACTCCACCATGCTTAACTTGTGGC	1488	IPCHQRKRVRKMGMLKRAKTHQKAQKIKE LLLKHYPNQITELRHKNPYELLVATILS AQCTDARVNQITPKLFKYPYVNDLAL ASLEEVKEIKSVSYFNNKSKHLISMAQ KVVRDFKGVIPSTQKELMSLDGVGQKT ANVLSVCFDANCIAVDTHVFRATHRL GLSNAKDPIKTEEEELSDLFKDNLKSLHH ALILFG
HP1259	1489	CACCAATTCGTTCAATAAAAACCCCATTTAATGCGGATGTGGAGCTTAGATGATGTGTTCAATCAAAAGCGAATGCA AGCGTGGTTGCAACGCAATTTTAAAGCCTATCCTAGTGTCTGTTGCTGTTGCGCCAACTTATGATGGGTTTCGC TCAATCTTTTGTATCAACATGCAAGCTAGTGAAGGGGACCACTAGGGCAACGGCTTAGAAGGAGAATAGTTAGC GCAACGCTAAACACATCGCTAATATCCCCACGCTATCGCTTATAATGGAGAAATAGAAATCAGGGGGGAAAGTAT CATTTCTAAAAGGATTTGACGCTTTGAATCAAGAGCGCTTAAACGCTAATGAACCCCTATTCCGCTAACCCCAAGAA GGCGCATCAGGGAGTTGAGGCAACTTGATAGCGAAATCACTAAAGCGTAAATGCAATTCATTCCTTGGGGCG TGGGCAAGCATCTTAAATTTTAAAGCTTTAAGGAGTGTGATTATCTGCTCTGTTAGGTTTAGCGGCCATTCA ATACTAAGCCTAAACAAACCAACCAAGAAATAGAGACAATACCACCCCTAATAGAGAAAGGAGGGCTTTT TGCCCTTTTAGACGGCATGTGATCGTTGTGAATGAATTAATTAACAAAGGAGCTAGGCTACACGCAAAAATCCC CTAAATTCGCTTGCCTTATAAATCCCGCTTTAGAAACACACCAAAATTTAGGAGTCAATTAACCAAGTGGGC GCAGCGGGGATCACACCGTCTCTTTTAGAGCCTGTGAAATTTGCTGGAGCTATGATTAATAGAGCGACCTT ACACAATTTCTGAAATTGAAAAAAGAAATATCATGCTCAGTGATAGGTCGTTGCTATTAGAGCGGGCGATGTGAT CCCTAAATCATCAAGCGCTTTAGAAATCTTATAGAGACGGCTCGCAACATAAAATGAACGCCCAAGGTTTGCCCTAT ATGTTCCGATGAGCTT	1490	TNSFNKNPHLMRMWSLDDVFNQSELO AWLQRIKAYPSASFVCSFKLDGVSLN LLYQHGLKVATTGRNGLEGEELVSANA KHIANIPHAIAVNGEIEIRGEVISKKDFD ALNQRERLNAEPLFANPRNAASGSLR QLDSEITTKRKLQFIPWGVGKHSNLFL SFKECLDFIVSLGFSAIQYLSLKNHQE IEDNYHTLIREREGFFALLDGMVIVVNE LNIQKELGYTQKSPKFACAYKFPALK HTKIVGVINQVGRSGAITPVALLEPVEIA GAMINRATLHNYSEIEKKNIMLS DRVV IRSGDVPIKIPLESYRDSQHKIERPK VCPICSHELLCEEIFTYCNLNCPPARK ESLIHFASKDALNIQGLGDKVIEQLFEE KLIFNALDLYALKLEDLMRLDKFKIKKA ONIIQAIKSKNPBIW

HP1259	1491	ATGCGAGTGGGAGTTTGTAGAAAGAGAAAAAGAAAAAGCCAAATGAAAAAGCCCTTTCAGGTATTCAGACGAG TGGCCACCTTAGAAAAAGACAAGACCATGCCCTGTGGTGGCTTAAAGGCCCAATCATCGGTGCTTTCAT CGATGCGATTAAAAAGAAAGTGAATTTGAACCTGATGAATGATCTTTGTGCTTTGAGACAGGATAAAGCC TACCTATAATTCGCTTGGCATGCGATGATTTGCTTTATAAATCAGTCTGATTTAGAGGCGAAGATCATGTGAT AACACCCCAACAATCTTAATCCAGCAAGCTTTAGGCTCCAATGATCCGATGTTTATGCGCATTTGCCATTAT TTAGATGAAGTAAGCGGTAAAGAGATGAGTAAAGAGATGAAGCTCCAGCGTGAATGGCTTTTGAATCAAGGGT TTTACCGGTTGCGATTGCGAATACCTCATCACTATCGGTAATAAGTGCCTAAGGAAGTTTAAACACTTAAACACG GATAGAATGTTTAGTAAATCTTCCAGTTCTCGGCTCATTTAATTAATAATATTAAACACTTAAACACG AGCATTTAAAGCTTTTAGACGATGACAAGTTATAGAACTCACTCAATAAAGATAAAACCTCTTAGGGCTTTAAG ATTGTTATAGAAGATGCGGACGCTTTAGAAATGAGGGAATAATTCGTTGTTTAGAGCCAAAGGATATTGTT AAACTTATGAAATGAAGATTTAAAGAGCGTTGTTAGCGCTTTTAAAGCTTAAAGGTAAGGATTTTCAACCTTTGC ATAAGGATTTGAAAGTTTAAAGAGAGCCATGCGATTAAAGCGCTTAAAGGTAAGGATTTTCAACCTTTGC GCATCCTTTAAACCGGAACCTGCGATGGCTTGAATGCTTGTGATTTCCCTATATCCAAAGCCATCATCAAGAAG TTTTAAG	1492	ASAEFLEREKEKAKNEKRPFRYSDEW ATLEKDKHAPWRLKAPNHAVSFNDA IKKEVKFEPDELDSFVLLRQDKSPTYNF ACACDDLLYKISLIIRGEDHVSNTPKQIL IQQALGSNDPIVYAHLPILDEVSCKKM SKRDEASSVKWLLNQGFPIVIAINYLT IGNKVPKEVFSLEAIEWFSLENLSSP AHFNLYLKHNLNHEHLKLLDDDKLLELT SIKDNLLGLRLFIEECGTLLELEKIS LFLEPKDIVKTYENEDFKERCALFNAL TSMDFQAYKDFESFKKEAMRLSQLKG KDFFKPLRILLTGNHSHGVLELPIFYIQS HHQEVRLKA
HP1259	1493	GAATGGGTGGAGATTGAGGGTTGGAGCATTTGGATAAAGTGATTTATAGATCAAGCCCCCATAGGCAAAACCC CACGAAGCAACCTGCCACTTACACGGGAGTGATGATGAATCAGGATTTATTTGCCGAGCAAAAAGAGCTAA ATTTAGGCTATAGTGGAGCGCTTTAGCTTTAATGTTAAGGAGGGGCGGTGCGAGAAATGCCAAGCGGATGGG ACATTAATAAGAAATGCACCTTTGCTGATGTTAGTCCATGCGATAGCTGTAAGGGCGCTAAATACAAACCC AACTTTAGAAATCAAGTGAAGGCAATCCATTGCCGATGTTGAACATGAGCGTGAAGAGGCTTATGAATTT TTGCTAAATCCCTAAATCGCGGTGAAGTAAAGCAAGCTTATGATGTTGGCTTAGGCTATATACCTTTAGGGCA ACGCTACGACTTTAAGTGGGGGGGAGGCTCAAGGATCAAAATAGCTAAAGAAATGAGTAAAGAGACACAGGCA ACCTTTATATTTAGATGAGCTACTACCGTTTGCATTTTGAAGACGCTGAATCATCTTTTACAAGCTTGCATCTT TAGTGGCTTAGGCAATCTATGCTAGTGATT ACGCTCTCCAGTCAAGCACGCTTTGGGTAGTGCCACCCAGTAAATGGACGAACAAGAGCTTATTAATGAGGG CTATTATGCGATTTTGGGCTGCCGGGCAAGGACTGAAGTCCAGGCTGTAGCTTGTGCTATGGCAATCAAGCG AGGTTAGGGATAATGCGGCTGCTTTCCACTTCCACACGCAATTTGATAATCGCATGGTAGAGGGGCTAAAGT GTATTTAGGCAAGTGGGAGCTTGGGGCGGCTTACTAGGGCGAATCCCACTAAAGAAAGATACATGAAT TTAGTGAGTGA	1494	NGEIVGLEHLDKVIYLDQAIPGKTPRS NPATYTGVMDEIRILFAEQKEAKILGYS ASRFSNVKGGRCCKCQGGDGIKEM HFLPDVLLVQDSCCKGAKYNPQTLEIKV KGKSIADVLNMSVEEAYEFFAKFKPIAV KLKTLMDVGLGYITLQNAATLSGGEA QRIKAKELSKIDTGTLYLDEPTTGL HFEDVNHLQLVLSLVALGNSMLVI
HP1259	1495	TAGTGGCTTAGGCAATCTATGCTAGTGATT ACGCTCTCCAGTCAAGCACGCTTTGGGTAGTGCCACCCAGTAAATGGACGAACAAGAGCTTATTAATGAGGG CTATTATGCGATTTTGGGCTGCCGGGCAAGGACTGAAGTCCAGGCTGTAGCTTGTGCTATGGCAATCAAGCG AGGTTAGGGATAATGCGGCTGCTTTCCACTTCCACACGCAATTTGATAATCGCATGGTAGAGGGGCTAAAGT GTATTTAGGCAAGTGGGAGCTTGGGGCGGCTTACTAGGGCGAATCCCACTAAAGAAAGATACATGAAT TTAGTGAGTGA	1496	APPSQARLWVPPSKMDEQELINEGY YAIFGAAGARTVPGCSLCMGNQARV RDNAWVSTSTRNFNRMGRGAKVYL GSAELGAACALLGRIPTKEEYMNLS
HP1259	1497	AACCATGATTACACGATGTTTGGCGACCATGCAAAAGGGAGTGGCGGAAATCGTGGTGGAGCGGACTTTC ACAAGGCTTGGCGGCTTGTGATTTGAGGTTAGCTAATAGCTCTATCCAAGAAAGCCAAACAGCGGGTCAATC GGCTTACAAAATAACGATTTTACCTTCCCGCTTAAATAATCACCATCAACCTTCCCGCTCAGATTTGCCTAAATCC GGAGTCAATTTGATTTGCTATCGCTTTTAAATCGCTTTGCAAAACAAGAGTGGCTTTTAAAGAGTGGTTGCTT TTGGGAGTTAGGCTTGTATGGCAAGATCAACCCCAATCCTAACATTTTCCCATGCTTTAGACATTTGCCATTAAAC ACCCCATGCTAAGATCATTTGGGCTAAGGCCAATGAAGAGCTTTTTCGCTTATCCCTAATTTGCAATGCTTTTTCG TGGGCAATTTAAAGAGCGTTAGAAATCTTGCAAAACCCCTGAACCAAGCAAGCAGACACCCACGAAACAACTACCC TTTAAACGATAGAAATGAACGATAAAGAGTATTATTTTACAGCGCTTATGCTTATGCTTAAAGAAAGTTAAGGGGC AAGCTGTCGCTAAAGAGCGGCTTTGATCGCTAGCGCTGGGTTTCACTAATGATTTTAGAGGGAAGTCCAGGCTGT GGGAAAGCATGATCATTAATCGCATGCGTTATATCTTGCCCTCATTAGCCTGAATGAATCCTAGA	1498	TMINTMFCATMQRGVAEINAVEATFTR ALPAFVIGSLANSSIQEAKQVQSALQ NNDFTFPPLKITINLSPDLPKSGSHFD LPIALLALQKQELAFKEWFAGGELGLD GKIKPNPIFPMLLDIAIKHPHAKIAPKA NEELFSLIPNLQCFVGHFKEALEILQN PETKADTHTKLPFKTIELNDKEYYFSD AYALDFKEVKGOAVAKEAALIASAGFH NLILEGSPGCGKSMIINRMRYILPPLSL NEIL

[illegible]

HP1259	1505	ATGCTATCACCCCTACCATGGAGCCCATGGTTTATGGATGATATCAAAATTGGACITTAAGACATTAATAA ATTCCATTGCTCTATTATCAGCCTAAACGCTATCGTTTGGTAGGGATGCAATCCCAAGGTTTITGA ATTGAGTAAAGCATTTTGAATCCTTAAACCTTGATGAAAGCTATCCCAACCTTACATGAAGAGCCTAA GCAAGATGAGCAGCAGGCGTGTGATGAAAGCTATCCCAACCTTACATGAAGAGCCTAA CCTGCTTCAAGCATAAAGATCAAGTGGCTTACAGCAGTAAAGTGGTGGCTTGGGATGAAGTG GCAAGCGAATTAGTGATGATAAAGCTTGGCTTCTCAAGCTTCTCGCAACATGCAATTAACAAGATGAAGCG TGTTTTTATTCATTGCGGGGTATCTAATGTCAAGCGGAATTAGCAAGCTCAAAATCAATCAAAAGCTTTTAA AGCTGAAAGAGCGGAATCACTCAAGCGGAATTAGCAAGCTCAAAATCAATCAAAAGCTTTTAA TAGAAGTTCTAGCGATTTGCGGGCTTTTGGGACTATTAGTGCAAAAGCTTTCAAGCTTGACGGATTAC CAGCGACAATTTTGGATTTAAAGTGAGCGATTGGTGCGTGGCTTCAATGATATTTAAAGACACCAATCAAC ACCGTGTTTTGAACCTTAAAGAGCCTTATAACATGCAATTTGCTGCGCTTCAATGATGCGCTTTTAA AGATTGAGCGTTGATGAGCGCTTATGAACCTTATGAACCTTATGAACCTTATGAACCTTATGAACCT CTGTTGGCAGCAGGAGATCCGCCAGCTACCCACAAAGAGCACATGCGTTGCATTGAAATCGCCATAGAAC TTGCAAAACACTAA	1506	VYHPYHWTPIGFMEDIQNWTLKDIKF HSLYYQPKNAIVLVWGDVNSQKVFELS KKHFESLKNLDEKAIPTPYMKPKQDG ARTAVVHKDGVHLEWVALGYKVPFAK HKDQVALDALSRLLGEGKSSWLQSEL VDKRLASQAFSHNMLQDESFLFIA GGPNVKAELQKE:VALLKLEKKEIT QAECLKINQKADFI:SNLESSSDVAGL FADYLVQNDIQGLTDYQRFQFLDKVSD LVRVANEYFKDTQSTTVFLKP
HP1259	1507	ACCTCAAGCCCTAAGCCTAACACCCACAGATCATGGCAGTTTAAACCTGACTCCGGATAGCTTCTATGA AGCGGTTTGTAGCAAAAGCGCTTGAAGAAATCTATCAATGCTAGAAAGGGTATCAGCTCATGATATAG CGCGGCTAGTTCAAGGCCAGAGAGTGAATCATGATCCAAATAGAGCAAGATCGCTTAAAGAAATTTATTAG AAATCAATCCCAAACTCTACCAATCGCCAAATAGCATAGACACCTACCATGCCAACCGCCCAATGGCT TTGGAGCATATTTTCCATCTTAAATGATGAGCGTTTAAAGCTGAAATGCTAGAGTGGCAAAAGATTAC AAGCCACTGCAATTTAATGCACACTCAAAACCCCAAGACATGCAAGAAATGTTTACCAAAATTTATTG ATGAAATGGATCGCTTCTTAAAGGAAACTAGAGTTTAAAGAAATACGTGCTCAAGATATTATTTAGATATTG GTTTGGATTCGCTAAATTAAGAGAGCATAATTTAGCTTAAATCAAGCAATTAAGCCACTTCTCAAATTC TTATTGGTGGCGGAGTGTAAAGACAGTGGGCTTATCAAGCTTAAAGCAAGTCAAGACCGGCTCGCCGCA CTTTGAGTTTGCATTTAATGGCTTGAAGATGGAGCGGCTTAAAGAGTGCATGATGATGAGCATATAGATT TAATCAAGTGTTAAGAGTTTGAAGAAACGATTGAACCAAAATTTTAAAGCTTATGATCCCAATGCGTGGT CATCAAAACGCTCAAAAGCGTTTGTATCAATCAATCTTGAATCAACCTTAAAGCAATCAATCCATGTTGAA GGGTTGTGAAGCGTTTGGTAGCGTTGCAAAAGCGTTATGGTGGTAGCGTTAAAGGTTGTAGGGCTTTT GTGCAAAACCATTT	1508	LKAPKNTPQIMAVLNLTPDSFYKSR FDSKKALEIYQWLEKIGITLIDIGAASSR PESEIDPKIEQDRLKEILLEKSQKLYQ CAKFSIDTYHATTQAQMALEHYFSILNDV SGFNSAEMLEVAKD'YKPTCILMHTQKT PKDMQENVFYHNLFDMDRFFKEKLE VLEKYVLQDILDIGFGFAKLKEHNLALJ KHLSHFLKFKPLLVGASRKNITGLITG REVQDRLAGTSLHLMALQNGASVLR VHIDEHIDLIKVKFSI.EETD
HP1259	1509	GCAACATGAAAAATTTAGTAATCTTAAGCGGGCTGTATTTAGCAGAAAGCGGATTAACCTTTAGAGACGCT GATGGCTTGTGGAAAGGCGATGACATCATGGAAGTTGCTCGCTTATGGCTGGAAGAAAGAACCGCAAGGTG TTGGATTTTACAAACCAAGCGCGGACAGCTTTTGAAGTTTATCCTAACAAAGCCCATAGGCTTTAGCGGAATTG GAAACACATATCAAGTCAATATCATCACCCAAATGTAGATGATTTGCATGAAAGAGCGGTTCTTCTCGCAATTTG CACTTGCATGGGAATTATTAGCGTTTCGAGCGAGAAAGATCTAATTTAGTTATAGTTGGGAAAGGACTTGAA TTTAGCGGACTTGGCCAAAGACAAATCGCAATACGCCCTGATATTGTGTTGGGAGCGGCTTGTGCTTA AAGAGCGGATTTCTTAGTCAACAAAGCGCATCTTTAATCATCATTTGCAAGCTTCTTCAAGTCTATCCCGCGCTA GCCTCTACAGCGCATGCGCATAAAGCGCTCTCA	1510	NMKNLVLSGAGISAE:SGIKTFRDADGL WERA
HP1259	1511	CTCTAAGAGAGCTTGATGCATGCCATTAATCAATTAGAGTGGGCTGCTATTTAAAGAGTTGAGTCAGATTTTGA GAGCACTATTACAGAAAGGGCTTTGTGCTTTGAAAGGATTTGCGGCGCATGGCATTGTAAGAAACCCCATGAAG AGCCAGAGATCCCAACTACCTAGAAAGGCGTCAACCTTAATAGCGCCCTAAATCAAGAGGCGCATGGTATT TGCTTAGAGCCTATGGTGTGTCAAAAACAGGCGGAGCTAAATACTAGCGGATAAGTGAGC	1512	SKESLMHAINSRVGMHFKELSQILESTI TERGFVPLKGFCHGIGKPKPHEEPEIP NYLEKGVKPNSPGKIKGEMVFCLEPM VCQKQGEKILADKWS
HP1259	1513	CTTATTAGGGGATCATCTTCTGCTTACATCAATGACATACCATGAAACCTTTTGCAACAAG CCGCCACTATCATGCAAGTCTTATTACTCAAAAGCGCATGTGCAACGAGCAATGGCGTAAAGCGTGGGGTT GAGTTCTACGCTGGGAATGTGATGATATTTTGGTCTTCTTTAACGCTATTATGAGATGATTAAACCGCTCA AACAGCCTAGCAAAACCCCAACAGCTTAACGCTAATGAAACGCCCAATCACGCAACCCCAATTTCAACCCCT ACACCTCTAAGACAAAGGTTGCTCAAGAAATGCTCAATAGAGCTGAAGCTCAAGCAGAGATTTTAAATTTAGCTA AGCAAGTAGCGGAACAATTTCCACAGCATTAAGGGCTATTCAAGGGGATTAGAAAGATGTAAAGCAGGATCGGCT GGCGGATGACTAATAACACTTGGG	1514	YSGGSSFSPTIQLTYHINNAENLLQAAA TIMQVLITQKPHVQTSNGGKAWGLSST PGNVMDIFGSPFNAINEMIKNAQTALA KTQQLNANENAQITQ'PNNFNPTYSKOK GFAQEMLNRAEAQAEILNLAKQVANNF HSIQGPIQGDLEECKAGSAGVITNTW

HP1259	1515	GGCGTGATCACTAATAACACTTGGGG CCTTAAACCCCTTAAAGACGCTTTTACAGAGATTCAATCATAATGAGCAAAAGTTACTGATAGGGCAGCTAAAA GCGGTTGCAATCAATCTAGCGCTGATAAAGTGGCTGCTAGTAAACCGCTTACTCTACTGCAAGACAAATCTGTTA AAGTGGAATTGGGATAAACCCATTATCAAGGACTTCTTAAAGGCAATAATTACCTTTATAGGAGGTTTGTGTTTT ATTGGGGAAGCATTTATGGACAGATTTTAAAGAAATACGCTAAGCGGAGCTGAAAGACTTTATGTCTAGTAAGGA GTTTGTGCTAATACCGATACACCCCAAGCAAAATACAGAAAGAGCGAAAGAGCTGCAATCGTATTAGAGAAATAA GCGCGATTATAGGGTTTGTCAAGCGCTTAACCTTTTAAAGAGACAAACCGCAAGATCCCTTTTACCCCAATGAAGA AACGAGCTTTTGGTGTGCTAATGAGCCTACTATCGTGTATTAATTAAGGGATTATTTATGGTGTAGCGCAATC TTTAAACCAACGCGATCTGTTATTGTGAAGCAAAATGCCCTATAGA	1516	FKPFKDAFYRDFNHNEQKLLIGAASG CIQSSADKLAQLKTRLLYWQDKSVKVD WDPILIKDFFKGNLYLRRFCFLGK HFMDRFLKNNAKASVKDFMSSKEFVA KYRYTPKQNTERRAKKLQSYLENKRDFI GFVQALNSLKDNPQDPFLPNEETSFLV FANEPTIVNLRDYLVLVLAQIFNQQAIC YCESKCP
HP1259	1517	TGAGCCTAAACCTTACGCCAAATGGCAAGAGCAACGCTTAAACGCTAGGAAAGACAAACCATGGG GATTTACATTTGCATGACGGCGCTTATCGAACGGGCTTATGCAATTTGGGCGATGCTTAAATAAAATTTTAAAA GACATTTGCTGTTAAAGAGAAATATTTAAGGGAGAAATCTATTACACGCCGCTGGGATGCCATGGTTGCC CATTGAGCAGCAAAATTTAGAGCGATTAGAAAGAAAGAAAGCAAGCTAGAAACCCACGCTGTTAGAGAAAGT GCCGAGATCATGCGAAGAAATTTAGAAATCCAAAGAAATGAATTTTGGCAATGGGTGTTGGGGGATTTGAAG ATCCTTATAAACCATGGATTTTAAATTTGAAGCGAGCATTTATAGAGCCTTAGTGGAAGTGGCTAAATAAGGGCTTT TGAAAGAGCGCCACAGCCTATTATTGGAGTTATGCTGCGAGAGCGCTTAGCGGAAGCTGAAGTGAATACAAA ATGAAATAATCGCCCTCCATTTTCGTGGCTTGGTTGAAAGAGAGAGTTTAGAAAATTAAGTCAAAAAGCG AGCTTGGTATTGGACGACCGCTTGGACTTGTATGCGAATGATGCGATGCTTTGAAAGAGACGCTGTTTA TGCGCTCACCCAAAAGGCTATTAGTCTGCTAAAGCCTTGCATGAAATTAAGCGCTTAGGGTGGTGAATG AGATCACACATGAATCAATCCAATGATTAGAAATTTAGTGCTACAAACCCGCTCAATCAAGGGATCGCTGG TGCGCTTAGGAGAGCATGTCGGTTTAGAAGATGGCAGAGCGCTGCATACCGCACCTGGCGCATGGTGAAGAGG ACTATTATTAGCCTAAGAJATAATTTAGAAAGTGTAAATGCTGTAGATGAG	1518	EPKYAKWQEQQAQAFKRMQARKDNHG DFTLHDGPPYANGHLHLGHALNKILKDI VVKREYFKGKIYTPGWDCHGLPIEQ QILERLEKEKTSLENPTLFREKCRDHA KKFLEIQKNEFLQLGLVGFEDPYKTM DFKFEASIRALVEVAKKGLLKERHKPI YWSYACESALAEAEVEYKMKKSPSIFV AFGLKKESELEKLVKKASLVVWTTTPW TLVANVAIALKDAVYALTQKGYLVAKA LHEKLAALGVVDNEITHEFNSNDLEYLV ATNPLNQDRLVALGEHVGLDGTGA VHTAPGHGEEDYVGLRYNLEVLMSV DE
HP1259	1519	CAACAAAGTAGGGCGTTACGGAAATTTGCGATGTAATGAGAGAGGACCTTAGGCTTTCATAAGGAGTTAAAA AGGGCGTTGAAGCGGAATAACAAGATCAAGTGAGCATTTAAACCCGCATTATAAGATGAACCTTAACTTAAAGCG AGCGTTAAATCACGCCCTTAGGGGCTTGGTGAGATTGGGGGAACATGATGTCATTGAAACCCCAAAAGCG CGATCGTGATTGATGCGGCGATGAGCTTCCCTAAGAGGGCTCTTTGGCGTGATATTTAATCCCGGATTTTCC TACTTGACCAAAATCAAGGACAAATCGCTGCTTATGCGATTCATCACCCATGCCATGAAGATCACATAGGGCCACGCC TTATTGTTTAAAGAGCTGCAATCCCTTTATGGACGCCCTTGAGTTGGGCTGATTGGGAGCAAGTTTATGATGA ACATGGTTTGAATAATACCGCTGCTATTTAAATCGTAGAAAGCGCTTACCGATCCAACTAAAGCCGGAATTTATCAT TGAATGGATCCACATCACGCTTCTATCATTTGACAGCAGCGCTTAGCGATCCAACTAAAGCCGGAACGATCATCC ACACCGCGGATTAAATCGATCACACCCCGTGGATAATTTGCCACGGATTGTATCGTTTAGCGACTATGCC GAAAAGGGGTGATGCTTCTTTAAGCGATTCCACCACTCCCAATAATCCGGGACTACCGGAGTGAAGCACCAT AGCGCCGGCTTTGATACCTTTTAAAGAGCGCAAGGAGGTTGATTATGAGCACCTTCTCTAGCAATATCCACC GGGCTATCAAGCCATACATACGGCATTAATAACACCGCAAGATCGCTGATCGGGCGCTCTATGGAAAAAAC CTAGACATCGCTAGAGAAATGGGCTATATCCATTTGCTTATCAATCTTTATTGAAGCCAATGAAGTCGCCAAATAC CCGACAAATG	1520	NKVEGVTEILHVNERGTLGFHKLKKG VEANNKIQVEHLNPHYKMNLSKASVK ITPLGGLGEIGGNMVIETPKSAVIDA GMSFPKEGLFGVDILIPDFSYLHQIKDI AGIITHAHEDHIGATPYLFKELQFPLYG TPLSLGLIGSKFDEHGLKRYSYFKIVE KRCPISVGEFIEWHITHSIIDSSALAIQT KAGTIHTGDFKIDHTPVDNLPDLYRL AHYGEKGVMLLSDSSTNSHKSCTPS ESTIAPAFDTLFKEAAGQGRVIMSTFSSNI HRVYQAIQYGIKYNRIKIAVIGRSMKLN DIARELGYIHLPHYQSFIANEVAKYPDN
HP0962	1521	TTTTGGACGCAATGATAAAAAACAGGAAATGCGATTAAACGCATAGAAGCACGAAATGTGGGTAAAGCGATGA CTTCAACAAAGGTATGAACGAAACATTAAAGTTAATCAACCTGTTAAAGCTA	1522	FLDAMIKKQENAIKRIEARKCAVSDDFK QGMKRNKIVNLLVKA

HP0962	1523	AAGAAGCGGTGTAAGAAAGGTTCAAGAAAGCTTTAAAGCCCTAGACAGGCTAAAGAAAGATGGCTTAAAGCCCTTGA AGCCCCCATAGATGAAGAGAGACGAATTTGGTGGCTTTCATTGACCCCTAGCTTACAAACGCCAAACACTCAAGACA GACTCTATGATTTAGAACCTACCAGCAACTGATTAATGAATAGTCAAAACGATGGAACCACTTTAAAGCGCGG ATGGGTTTGAAGAGAGTTGAACGCTTGAATACAACTGCCCTTATCAATGACACTCTCATCGCAACCACTATAAA AATCCCTTGGCAATATCACTAACATGACTAAAGAGATATATCGCTCAAGTGCAGAGCGGACTATGGTGAGCGGTG ATATGGATCTTAAAGCTTTTGTACTAAGAGCGGAGGCTTTGATCTAGCCCCCAACAGCTAAAG AATTTTAGAGCAATCAAGAGGAGTTGATTTCCGATCGCTAAACCAAAATGGCTAAATCCAAATTTAAGGT TGGTGTGAGCATCGCTAAAGATTACGAGCAGAGCTTACCATCTTGGATTTGATTCAGAGGGCAATATTGGC TTGATGAAAGCGGTGATAAGTTGAGCATGAAAGGGCTTCAAGTTTCTACCTATGCGACCTGGTGGATCAACA AGCTATCAGCAGAGCCATAGCCGATCAGGCCCGCACTATCGCATCCCCATTCACATGATT	1524	KKRVEKVQESFKALDKAKKEVLKALEA PIDEREDELVRSLTAYKRQTI.KDRLY DLEPTSKLINELVKTMETTLKSGDGFKE ELKRLEYKPLFNDTLIANHKILANITN MTKEDIAQVPEATMVSVYMDLKKLFLT KEASEEGFDLAPNKLKEILEQIKRGKLI SDRAKNKMAKSNLRLVVSIAKRFTSRG LPFLDIQEGNIGLMAVDKFE:HEKGFK FSTYATWWIKQASRAIADQAIRIRPIH MI
HP0962	1525	CAGATTTAGAACCCATTAGTTCTAACGCTTAAAGAGTTGGGGACTTGAAATATCTTGGCGGACGATCAGGAAT TATTTTCAATCCTTTCTAAGAGGCGATGCTTTATCAAGCCCATCTAGTGGCGTAGATTGCCACCTTTAAGCGG TTTGAAGACTATTGGCAAGTCGTTGCGCTTTGAACCTTTAAGGTGAATGAAGAACGCTTAAAGCGCGAGTGAA AATTTTGGGCTTTTACGCTGTTAAGAAACCCAGTTTGAGCGTTTGAAGAGTCATTGAGTGCGGAAACGCTTT TTGATTTTGGACTTTTGGCGTTTCTTGGCGACTGGTTACAGCGTTTAAATGGAAGTTTATTAGAGCTTGTG GGCAGAAGCGTTAAGAGAGTGGCTCAATCGCTGCTTCAATGAGTTTGAAGTTTGGCGAGGCAATTAGAGCGTTT GGAGTATCCAACACACAAATCACACGCTTAACTGATGGGTTAAACACGCTTTTAAACAGCCCTTTATTTTGTAC ATTTAGGGGTAAAGTTTAGAGCGTTTGAAGAGTTTGCATTTATAGAGCGCTGATGCTAGTACACGCG CCTGTAGAAATTTCAAAACAGCGGATGCACTGCTTGGTGGGAACTAGATGCGATTATGAAGGGTTTTTCA AACGATTTCTGAGGAGGAATATGAAGATGAACACACCAACCAACGATCATTTAAGCCAAAGAGCCAGAGTT TTGCGAAAGGCTTGCAAGAAACAAATATGAAGAAAGCAAGCGGGGAAAGAGCGGAGATCAAGGAA GATTTTGAAGCTTAAATATAAGAAATGCACGAAATATCTAAGAGTGCATGCGGATTTTGAACACGTGAAAGCGC TTAGAAAGAGACAGAGCATGGCAGTATGCGTATGAAAGATCGCATTTGCGGATGATGCGGCTGATTGATGC ACTTCTGGGGCTCA	1526	QILEPISSKRLKELADLKISCATIRNYFQI LSKEGMLYQAHSSGARLPTFKAFENY WQKSLRFETLKVNEKRLKSA:SENFGLF TLKKPSLERLERVEICEKRFILDFLAF SCALGYSVKMEKFLLELVGRSVKEVRS IAASFNALSLARQLERLEYSNTQITRFN LMGLKTLNPLFFDILGGKVLERSKG LHFIEPDCMLVTRPVEFQNKRMQLLCV GKLECDYEGFFQTISEEE
HP0962	1527	CTAGGGCTTTTAAACCAATTTATTTGCAAGCTACAAGGTAGAAAGGAATTTAAAGATTATAAGCCCTTTATGAAT GGGTATAGAGATTTTACCTCAAGCCATTTGGTGGTGAATGAAGAAACGGGAGCTTTTATATAAAATCTTTAGCCA ATCAAAGCCATGAGGTGTTCAATAGGCTAAATAGAAAATTTTAACTGAAATGAACATGAATAAAGCTATTT AGTCAGCAAAACAGCATTCAGGCAAGCAATCATCACCGCAACGATATTAGCGCTCAAAACGCCAAGAGCGG CTCGCTTCTATGGGAAATCTCAGCGCATTTAGCCCATGAGATCAGAAACCCCTGTAGGTTCTATCTCTCTTTAGCT TCAGTGTATTAAAGCATGCGAACGAAAGACTAAGCCCAT	1528	LGLLNQFILOSYKVEKEFKDYK'ALYEW VIELPQAIWVNENGSFFYKNSLANQS HEVFNKAKLENFNTEIEHENK:SYLVQQ NSIQGKQIITATDISAQKRQER_LASMGK ISAHLAHEIRNPVGSISLLASVLLKHANE KTKPI
HP0962	1529	TTTAAAGGGCGTTTGGGCATGACAAATAAGAAAGATTAAACGGCTTTTACAAGAAAAAGCGTTTTTTTATAGAT GACAAATTTAGAAACAAGCACTTAGACACCAGATGGTAGCGAGTTTGTGGGAAAAAAGTAGGGCTTTATTAAAGAT CCAAGAGGCTGTGATTTTATGCAATTTATGCAATATCCCAAGCGTGAGAGGGGCTAGGAGTTTGAAGAGA GAAAAATTTAGAGCAAGTGGGCTTTTATGCTCTAAAGGGTTCAAGAGTGGTTTAAACCGGCACCAATGTGGG AGCTATGGGAAAGATAGAGGAGCAATATCGCGGATTGATTAAATAATTAAGCCAGATCGCTGGATTAAACGCGAT AAGGATTGGGAGCTTAGAACCTAATCAAAATTAACGATGAATTTTAGAGCTTTTAGAGAGGATTTTATAGAAAAACAT TTGCATATCGCTTTACAGCACAGCCATGATCTCATGTAGAGGATGAATCGAAGAAACCGCACTAAAGCGGATAG GGAATTTAGAAACAATCGCTTCTAAGAAATTTGCTATTGGCACGATTTTATTGTGGGCGATCCGGCGGAGAGCG GAAGCGTTTTGAAAAAGCGTTTAAAAATTTAGAAAGCTTGGCTTTAACGCACATCCACCTTTTATTACAGCAACCG AAAAGACACCCCTCTAGCTTATGACTGATAGCGTGAATTTGGAAGATTCTAAAAAGCGTTTGAATGCGATTAAAGA TTTGATTTTTCATAAAAAAAGGCGTTTCAAGCAATTCAGCTCAATACGCTCTAAAGCGCTTAGTGGAAGT GCAAAAAGACGGCGAATTTAAAGCCTTAGATCAATTTTCAACCCC	1530	LKGVFGHDNKEKINALLQEKRRFFIDD NLENKHLDTTMVSEFVGKTRAFIKIQE GCDFDNICYCHPSVRGRARSFEERKILE QVGLLCSKGVQEWLTGTNVGSYGKD RGSNIARLIJKLSQIAGLKRIRIGSLEPN QINDEFLELEEDFLEKHLHIALQHSHD LMLEMRNRNRRTKSDRELLETIASKNF AIGTDFIVGHPGESGSVFEKAFKNLES PLTHIHPFIYSKRKDTSSSLMTDSVSLE DSKRLNAIKDLIFHKNAKAFRLQLKLN TPLKALVEVQKDGDFKALDQF:FN

HP0962	1531	CAGCCATTAGTCGTTTATGATCGAACCTTAAATAGAGATCAATAAGTTATCCCTGAAAGTTATCAAAAAGAGTTTGAG AAGTCITTTGTTCTCCAGTTGAGTAGTTTATAGAGAGAAAGGCTATAGCGTTTCGCAATTTAAAGATGCTAGCGAA ATCCCTCAAGACATCAAGAAAGCGTTGCTCGTTTACGCATGGATGGGATGCGCTATCTTGGAGATATTGTA GAAAGAGCGATGCGCTTAGCGAAGAAAGATGATAGACATGCTTCAGGGTATTGAACCTTGAATTTGTTGAGCC AAAAAGTGAAGATATTATCCATAGTTTGGTATTGATGTTTCAAGATTAAGGCTGTGATTGAAAGAGTGGAATTGCG GCGCACCA	1532	SHLVVLEPKIEINKVPIESYQKEFEKSL FLQLSSFLERKGYSVSQFKDAASEIPQDI KEKALLVLRMDGNVAILEDIVEESDALS EEKVIDMSSGYLNLNFVEPKSEDIHSF GIDVSKIKAVIERVELRRT
HP0962	1533	TTGGAATACGCTGATCCTAGCACCTTCTAAAAGAGAGCCGATAAGGATTAAAAGGTTCAAGAGACAGCAAAAA AGACGCTTGGGGTTCATCTATGAGATCAGCGAGTTTCATGAAAGCCTATACCGCATTTGCTAAAAAAACAGACCGAT ACGTCATTATTAGGTATCTCCCTCTAGGTATTGGCCAGCATTTTAAAGGATGCGCTTTATGCTCAATACCCCTG ATTTTGAGCGCTTGAAAGAGCTTTTGGTGTCTTATTATTAACCAACCTTGGATTGAGGAGGCGCATCACGCGCATCA AGCAAACAGTATCAACATTATCAAAACGTTAAAGCAATTAAGAGCGTTGAAACCATCAAGAGCTTATATTGAATA GCATCGACTCTTATAACACCTTTGATCAATACCTCTATACTTATGGATAGCTCTTCTGTTTATCATAGCAATGGGT GCGTCTGTCTTAGCCCTAGCTAATTATTCATGGCAGATGAAGAGAAACCCCATTTTATCGCTATGATGCGGAAAC CCAAGTGGAGCATATTTGCCACAAACGCCAAAGAGCGAGTCAATGGAACGCGGATTTTGACAAAGAAAAAGAG AAGATGGGTAAATAATATCGCGAATTTAACCTTTTAAAGCGTAAAGAACGCGCATGCTTTAAACGGGATTTTG ATGAAAAGAGAAATTTATGGAGGCAAGACACGAGCAAGTATGATGCTTATGACATCACTAAAGAAATTTGTATA GCAATTATAGGAAGTGAATGAGAGTCCCTCAAGAGCGATACAAATCTTTGTATAACACTATCACGCTGTTTTAC ACATAGAGGGCAAGAGATGATTTTGAAGATGATTTGATCTAGATTAAGATGCTCAAGCATCAAAACAAACA AAGAGGTGATCAATGCTTAAAGAGCTATTAAAGATGTCAAGAAAGGATTTTAAAGACTTCTTAAAGAGCGC AAACAGCACCGC	1534	LEYADPSTSKRADKGLKVFKDSKDD ACGFIYEISEFMKAYTALLKKQDRYVYL LRYLPSRYWASILTALYVKYPDFDALK KLLVSYYYQTWAGGTITRIKQTSINIKN VKSNSVETIKELILNIDSIDSYNTFDQYLY NLWDSSSVYHSKWVRPVLALANYFMA DEEKPHFIAMDAETQVEHILPQTPKRG SQWNADFKEKREEWVNNIANLTLLK RKKNHAHALNGDFDEKRIYGGKDTSK VISCYDITKELYSNYRKWNKESLQERY KSLYNTITPVLHIEGQEDDFEDDFOLE
HP0962	1535	AAGGAGAAAGGTATGATTATAAATCGCGCGCTTAAGGATCAATTATGTTTACCAACGAATACACCAT GAATTGAGCAAGCAGTCCGCTCCGCTCAATCCCTTTGTGCTGGATAATGACCCCTAGTTTGAAGAAGAGC CATTAAACACAAATACCTACTATATAGGCGATCCGACACCAATTTAGCCATGCTAAAAACCCACTTAAGCAG CGTAGGGGTGTTGCTGCTAAGATTTACCGGTGAATGTCGCTTAATGTTGAGCGTGGCTGTTGTTGAA AGGAATTAACGCAACCTTACTACATCATTCGAGCGCGCATAGCGATGAAGCTTAGAAATTAATAAATAG GGCTGATATGGTGTTCCTTACAAACTCATGGCCAGAGAGTGGCGGATGGCGGTGCGTCCGGATATGG AAAAATATCTAGAGCGTTTATCAATAAAAGACACGCTTTAGACTTAGAGGAAGTGTGCTCCCTAAACTAGCTG GCTTGTGTTAAGGAATTAAGAACGCTTTTAGAGAGATCGCTAAAGCGTTT	1536	KEKGMYYKIARLKHVYVICYHNEYTIELS KQFRSAQIPFVVVNDNDPSFEEEAIKHK YPYIIGDPHTNLAMLKTHLSSARGVVA LSKILPVNVALMVSURLFEKELKRKPY IIASAHSDEGLEKIKLKGADMVVSPTKL MAQRVSAMAVRPDMENILERFINKKOT LLDLEEVIPKTSWLVRKLKEAHFREI AKAF
HP0962	1537	ATGAGTAACCCACAAATTTGAGCAATAACAAATCTTAGCGAATTTATCAAGCAACACGAGAAATGAATTAGAC CAATGGAACGACTAGAGGACATGCAAGAACAGGCTCAAGCTAATGCGCTCAACAAATGAAGAACTCAACAGAA ACAAAGCTGAAGAGACATCAAGCAAGAGCCAAAGATAAATCAATTAAGACAGATAAGCCTCAAAAGCCCTG AGGATAACTCCATAGAAATATCTCAGGATAGCGCTTGAGAACTAATCTTGTGCGGACTAATAAGCCTTGT ATCAATTCATTTGAGAAATAGCTCAAAAGACAAATTTGCTTACGCTATCTAACAGTCAATTAGAATACCCACAAAG ACAGGAAGTCTTAGCGTTATTGAAGAGGAGTTAAAGAGAGAGAAAGCAAGGAGGAGAAAGAAATGATTAAGC AAGAAATCTTAACACCAAGCTTACATCAATAGATGATGGCAGCAATGAACAGATTATCAACAAAGAAAAAA TAAGAGAGAAAGCAAAATTTATCTTAGATCAAGCAAGGCGCTAGAGACTCAATATGTCATATGCTTAAAAA GAAACCCGCTGCTAGAAACTACAACTACTACCAAGCGCTGAAAAACGCTTAAACATATTATGCCCTCTGAAATTT TTGATGATGGACATTCATTTATTTGTTTCAAAACATCACTCTCAACCTGCTAATTTTGTGTTCAACCTGATGG GAAATTGAGCATGACTGATGCGCCCATTTGATCTCAATGACCAATTCAGGATTGAGATGATAGATTAAATGAAT TGCAAGAAAAATTAAGCTCATTAAAGACAAAGCCCTTGTAACAGTAATCAATAAGGCTATGGGAAAAATCCATTGAC AAAAAATTACAATATCAAAAATATGGTGAATTGGAGCGTGTGATTAAAGAGCTCCCTCTTGTGTCAGAGATAAATAAAAA GGCGTTAAGA	1538	MSNPQNLNNKNSLSEFIKQORENELD QMERLEDMQEQAQANALKQIEELNKK QAEETIKQRAKDKINIKTDKPKSPEDN SIELSPDSAWRTNLVVRTNKALYQFIL RIAQKDNFASAYLTVKLEYPQRHEVSS VIEEELKREAAKQKELIKQENLNTTA YINRVMMASNEQIINKKIREEKQKILD QAKALETQYVHNALKRNPVPRNYNY QAPEKRSKHIPSEIFDDGTFTYFGFK NITLQPAIFVQPDGKL SMTDAADPNM TNSGLRWYRVNEIAEKFLIKDKALVT INKGYGKNPLTKNYNIKNYGELERVIKK LPLVRDK

HP0962	1539	TGCAAAAGAACGCTCTTAAGGCTGCAAGAAGCTCTTAACAATACGCATGATTTCTTAGAAGACTTGATTTTAG AAAAACAAAAATCAAAAGAGCTTATGGATCATAGAGCTAAAGTTCTTCAGACTTAGAAAAACAATACAAAAAGAAAA GAGGCTCTAGAGAAAGAGACAAGGTAAATCCTTACTGCTAAGTCAAAGGCTTATGGGATTTGGAGCAAGCCTT AAAAGATAACCCCTCTCTATAGGAACTCTTCTAACCTTATGCCTATGTTTTAAACCAAGAACAATCACCAAGAA GATAGGAGCGTTTGAGTTATTACTACCCCAAGGTGAAACGAGCAGTATTTTAAAAAACCAACCTACCACTAA GATAAGGCTCAGGCTTGCTTCAATGGGTGTTTCTTTAGATGAAGAACAAACAACAAAAAGCGAGCCGATTAGCT TTATCTTACAAGCAAGCGATTGAAGAATATTCCAATAACGTTTCTAATTTATTGAGCAGAAAAAGAAATTGGATAATATAG ATTATTACTTACAGCTTGAAAGAAACAAGTTTGACTCCAAAGCAAAAGATATTGCTCAAAAGGCTACTAACACGCTTAT TTTTAATTGGAACGCTTGCGGTTTAGCATGGCGATTGATAAGATCAATGAGAAATACTTAAGGGGCTATGAGGCTTT TTCTAACTTGTTGAAAAATGTCAAAAGATGATGTGGAATTGAATACCTGACTAAAAATTTTACCAATCAAAAAATTGAGT TTGCGACAA	1540	AKEDALKARKKLLNNT'HDFLEDLIFRKQ KIKELMDHRAKVLSDLENKYKKEKEAL EKETRKGILAKASKAYGDLEQALKDNP LYRKLLPNPYAYVLNGETFTKEDRERL SYYPQVQKTSSIFKKTATTTKDKAQALL QMGVFSLDEEQNKKA'SRLALSYPKQAE EYSNNVSNLLSRKELDNIDYYLQLERN KFDKAKADIAQKATNT'LIFNSERLAFSM AIDKINEKYLGRYEAFSNLLKNVKDDVE LNTLTKNFTNQKLSFAQ
HP0962	1541	CGTTAAGGGGCTGATGCGCTTTTAGCCGCGCGCTTTTAAAGAAATTAGAAGAAATTGTGCGCCAATTTGGGGCTA AAGGCTTAGCGTATTTGCAAAATTAAGAAGATGAAATTAAGGACCTTTAGTTAAATTTTAAAGCGAAAAGGGGCTTA AGAATATTTAGAAAGGACTGATGCGCAAGTTGGGATATTGTCTTTTGGAGCCGGGATAAAAAAATCGTGTTAG ATTACATGGGGGCTTGCGCTTGAAAGGTGGCTGAAACGCTTATGATGATAAAGACGCTTTGAATTTCTTATGG GTAGTCAATTTCCCATGTTTGAAAAAACCGAAACGGCTATCATGCCGCAACCCCTTTACGATGCCATAAAAT ATAGAAATGCGAAGATATAGAAGAGGTTGAAGCGCATGCGTATGATGTGGTCTTAATGCGGTGAGCTTGTTGGGG GGAGCATAGGATTCATAAAGAAGAAATGCAAAAAAAGTCTTTGAAAAAATCAATATCCATGAAGAAGAACGCGCAAA AAAAATT	1542	VKGADALFSRSVLKEIEEFVRQFGAKG LAYLQIKEDIKGPLVK'FLSEKGLKNILE RTDAQVGDIVFFGAGIDKIVLDYMGRL RLKVAETLIDLIDKDALINFLWVNFPMF EKTENGYYHAAHPFTMPKNIECEDIEE VEAHAYDVVLNGVELGGGSIHKEEM QKKVFEKINIHEEEAAQKKE
HP0962	1543	AAATTGAATGTTTTGATTGAAAATTCAGCGCGCTAGAAAAGGGAATTGAAACAAAAAGAAATGAACATTTAGAGAACGCT TTAAAGAGCAAGAAATATTTGAAAAACGCATGCGCTTTTAGAAATGAAAAACAAAAAGAAATCTTTACAAATAAAAAAT TGGAATTTGAAAAATCCTACCAACAAAGCCCTAAATATCTTAAAGCGAAGTCGTTCAAAGATACCTAGCTCCATGC ATAAGAAATCCATAAAGCGAGCGGAAATTTTAAGCAAAACAAAAACAAGAGATCCACAAATCATAACGAAT TTCAAGCCCAACGAAAAAGCGCTACAAGAAATGAAAGCGTGTGATTGTACAAATTTAGACAAAGGCTATTATTGG ATAGAAACCGAGCTTGCGATGCGTTTAAAGCGCATGGGAGTTGTTGAAAAAATCCAAAAACCCCTTAAAAACAA ATTCAACCCCTAAACAACCATCTCTAAACCTAAAGAAGCGAGCTTGCGCTTGATTAAAGGGGCAACGCGAGCG AAGAAGCCCTGGATTTACTAGACGCTTTTAAACGACGCGCTTTTAGGGGCTTTGAAGAAGTGCTGATTGGCCAC GGCAAGGGAGCGGATTTAGAAAAGTTGTGAAAGA	1544	KLNVLIENSSALEREL'QKNEHLENALK EQEYLKNAWLLEMEKQKEIFHNKKLEL EKSYQQALNILKSEVA'SKDTSSMHKEI HKASEILSKHKTNQEIPQIITNFQANEKA RYKNESVLIVQILDKGYYWVWETELGMRL KAHGSLLKKIQPPK'HKFKPPKTTIPKP KEASRLDLRGQRSEEAOLDLDAFLND ALLGGFEVLICHGKGSGGILEKFKV
HP0962	1545	AGTCAAGTCCATTTCTTATGTGCGGCTTTCTTACATGCTGACATGCTCGCTAATGAAATGTAAAGATTCGTTGGTGGG CGATATTGGATTCTAAAAAATAGACACCGCTGTTTGCTTTGTTCAATCAAGGTATTTAAAGACGTTTATGCC ACTTTTGAAGCGGCATATTAGATTTTCATTTTATGATAAAAGCCAGGATTCGCGGGTAGAAATCAAGGGTTATGG GACTGAAAAGGAAAAGACGCTTAAATCCCAATGGGATCAAAAAGGGCGACACCTTTGATGAGCAAAAATTAG AGCATGCTAAAACGCGTTTAAAACCGCTTAGAGGGCGAGGCTATTATGGAGCGTGGTGAGGTGCGCACAGA AAAGGTCAAGTGAAGGTGCATTTATTGATCGTGTTGATGTGAATAGGGGGATAGCATTTATCAAAACATCCATTTA TGAGGGAAGCGGAAATTAACACGCGCATGATTGAATCTTTGAGTCGGAACAAGCAACGAGATTTTCATGGGCTGG ATGTGGGCTTGAATGACGGGAAATTCGTTTATGATCAACTAGATACGATTTCTATCGTATCCAGATGTGTATATG CGTAGGGTTACTTAGACGCTCATATTTCTCGCCCTTTTGAACCGGATTTTCTACCCATGACGCTAAGCTTCATT ATAAGTCAAGAGGGGATCCAATACAGGATTTACAGACATTTTAATAGAGATTGACAACCCGGTAGTCCCTTAAAAA CCTTAGAAAAAGCGCTTAAAGTGAAGGAAAGATGCTTTAATATTGAGCATTTAAGAGCGGATGCGCAAAATTTTAA AAACCGAAATCGCCGATAAGGTTATGCGTTTGGGTGGTGAAGCCAGACTTGATAAAGATGAAAAAACGGGCT TGTGAAAGTCATTTATCGTATTGAAGTGGGCGATATGTTGTATATCAATGATGTCATCATTTCAGGGAACCGGCGAC GAGCGGATAGGATCAT	1546	VKSISYVGLSYMDSMLANEIVKIRVGD VDSKKIDTAVLALFNCIGYFKDVYATFE GGILEFHFDEKARIAGVEIKGYGTEKEK DGLKSQMGIKKGDFTDEQKLEHAKTAL KTALEGQGYYSVWE'VRTEKVSEGA LIVFDVNRGDSYIKQSIYEGSAKLKRR MIESLSANKQRDFMG'WWGLNDGKL RLDQLEYDSMRIQDVYMRRGYLDHIS SPFLKTDFTSHDAKLIHYKVKEGIYRIS DILIEIDNPVPLK'LEKALKVKRKDVFN IEHLRADAQILKTEIADKGYAFVAVKPD LDKDEKNGLVKVIYR'EVGDMVYINDVII SGNORTSDRIIRRELI.LGPKDKYNLTCL RNSENSLRRLGFFFSKVKIEEKRVN

HP0962	1547	CGGCTCTAAAGAGCTTCAAAGGCTGAGATGGAGCGCCAAATGATCGCTTTAAAGAGAGTCTTGAAAAAATCGTA ACGAAAGTTTGGCGCAAGAAAGTCTTAACCACTACCGCAAGTCTTTAGATCATTTGCAAAAAAGCGATCATTTT TACAAAAGAGGGTGTGATACGCTTTACAGGATTTCTTTTACAAAGCCCTAAAGGGCAGAAATTTAGCCTCTT CTAATGATGTTGTTTGAAGTGCGCTTTGAAAGTTGCAACCAAGCACTCTGTCTAAATGTCGCAACTGAGCCAAAG AAGAAAGGAACTCAATACGCAAGCTTTAAAGTCAAAACAGCATTCAAAAATCTCATCATATAGATGAGCAAA AACTCGTGAAAGTAACTTAAATCTTTGAAACCCGAACAAGATAAGCTCATTTGAGCATGCAAAAAAGATTATGCGA TCT	1548	RSKELQKAEMERQMALKKSLEKNRNE SLAQEKVL.TNYRKSLDHLQKKRSFLQK RVFDTLLQDFLFSQALKGQNLASSNDV VLQVAFENLHQSTLSKMSQLSQEKEKEL NTQALKVKNSIQIKISSIDEQKTREVTLK SLKTEQDKLILSMQKDYAI
HP0962	1549	AGCGAACCTTAAAAACACTAACAAACACGAGCTATACGAACCTTAGGCTTTTATCAAAAAAGAAATAGATAAAAAAC AAACCATTAGCCTTTAAGAAATTTGCTATTCTCAATGGTTAGACAGAGACTTTGAAAGAGAGACTAATGGCTATTCT TGTTTAAAGAAAAAGAAATGCTTTAAATAAGCTTGAACACCTAGACAACGCCCTTTTAGATAAAAACTCACACTTA CTATTAGCCAGCTAAGAAATGAAGTTAAACCAAGCAAAACATCCATACAACTCTAATCTAATCTCTTTTAG CCAAAGCCTTAGAACCTTTCTAAGATAAAGCCCCACTCTCAAACTTTTAAACCGCTTATTTAGTGTAGAAAAATA TCAATTCTATGCTAGAGAGCTTTAAACTAAGCAAAATGACCCACTTACAGCTTAATGATAAACACTTATGAGCTAGT GAGTAAGCAACTACAGACTATCAAAACACCATGCTTTTATTAGCCAAAGAGAGATTACTTTTATTAGAACAGATTTA AAACAAAAGAAAGAGTTTGAAGAGAGCCAAAGAACATTATGTGAATCTTCAAAACATTATAGAGAACTTCTATTGT CTCCAAAAGAAAAACAGGCTTTCTCAAAACAAATTAACAAATTTCTAAATTTCTAAGGATATCTCTATCTATTGTAAT GAGATCATAGGAGCTAATAGGTTTTTAAACCCACTATGACAACCTAAACCTTGAAAAAGTCTTAGAACACGCTAAAGAT ACTA	1550	SEHLKNTNKHLYELLGYQKELDKKQ NHSFAKNFALNGLDRDFERETNGYSV LKKEMLLNKLHLDKRLDKNSHLLA QLRNEVTKQNIQYNTLTNPILLAKALE LSKDKRPTLKTFTKNAYFSARKYQFMLE SFKTKQNDPTYKLNNDNTYELVSKQLQD YQNTMLLLAKERLLFLEQDLKQKEEF ERAKEHYVKSSKHYRETSLSPKEKQG FLKQIKQFSKISKDILYTCNEIIGANRFLT HYDNLNLEKVLHAHAKDT
HP0962	1551	GATTCCTAAAGAAAGTGAAGGGCTTAGCGAGCGGGTAACTATCTTAAAGACGGCTATATTGTAACATAATA CCATGTGATTGATGGCGGATAAGATTAAAGTTACCATTCAGGGAGCAATAAAGAAATATCCGCCACTCTAGTAG GCACCGATTCTGAAAGCGATTAGCGGTGATTGCGATCACTAAAGACAATCTGCCACGATCAAAATCTCTGATTCTA ATGATATTTAGTGGCGATTGTTTGGGATTGGTAACCTTTTGGCGTGGCGAAGCGTTACGCAAGGCATT GTTTCAGCGCTCAATAAAGCGGGATTGGGATCAACAGCTATGAGAAATTTCAATCAACAGAGCGCTTCCATCAATCCT GGAAATTCGGCGGCTTTAATTGATAGCGGTGGAGGGTTAGTGGGATTAATACCGCTATTATCTCTAAACTGG GGCAACCCAGGCTTACTTGGCGTGGCTTCAAGATTGAGTGGCGATTGCAAAATCTTATGACAAACAAAGAA AGATTGAAAGAGGTTACTTGGCGTGGCTTCAAGATTGAGTGGCGATTGCAAAATCTTATGACAAACAAAGAA GGGCGGTAGTATTAGCTAGACAAAGAGCTCTCGGCTAAAGAGCAGGGATTGCTGCTGGGATTGATCACCG AAGTCAATGGGAAAGGTTAAACACACCAATGAGTTAAGAAATCTAATCGGCTCCATGCTACCCCAATCAAGAGTAA CCTTAAAGTCTATTAGAGACAAAGAACCGCTTACCCCTACTCTAGCTGAAGGAAACCCCTAACAAACAAAG AAACCATTTCTGCTCAAAACGGCGGCAAGGCCAATTGAACGGGCTTCAAGTAGAAGATTAACTCAAGAAACCAAA AGGCTATGCGTTTGAAGCGATGATGTTCAAGGGGTTTTAGTCTCTCAAGTGAATGAAATTTCCCGAGCAGCAAGC CGGATTAGCGCAAGGTAAC	1552	IPKERMERALGSGVIISKDGYIVTNHVI DGADKIKVTIPGNSKEYSATLVGTDSE SDLAVIRITKDNLPITIKFSDSNDSVGD VFAIGNPFGVGESVTQGIVSALNKSIG INSYENFIQTDASINPNSGGGALIDSRG GLVGINTAISKTGGNHGIGFAIPSNMV KDTVTQLIKTGIERGYLGVGLQDLSG DLQNSYDNKEGAVVISVEKDSAPKAG ILVWDLITEVNGKKVKNNTNELRNIGSM LPNQRVTLKVRDKKERAFTLTLAERKN PNKKTETSAQNGAAGQQLNGLQVEDLT QETKRSMRLSDDVQGVLVSVQVNEENSP AEQAGFRQGNITKIEEVEVKSVADEFNH ALEKYKGPKRFLVLDLNDQGYRIILVK VSENASQDEIKKSYRRRLARQYHPDLNK TKEAEKFKENAAAYEILSDEEKRRQYD QFGDNMFGGQNFSDFARSRGPSDEL DDILSSIFGKGGFSQRFSSQNSQGFSGF NFSNFAPENLDITAAALNVSVLDTLLGNK KQVSINNETFSLKIPIGVEEGEKIRVRN KGKTGRTTRGDLLLLEHIEEDEMYRRE K
HP0962	1553	TGTGAGCGAAACGCCAGCCAGATGAAATCAAAAATCTACCGCGTTAGCCCGACAATACACCGGATTGTA ATAAAACCAAGAACCCGAGAGAAATCAAGAAATCAACCGCTTATGAAATTTGAGCGATGAAGAAAAACGC CGCCAATACGATCAGTTGGCGATAACATGTTGGCGGCAGAAATTCAGCGATTGCGCAGAGCCGTGGTCTCTAG TGAAGATTAGACGATATTTAAGCTCTATTTTGGGAAAGGAGGCTTTTCCGAAAGATTCTCAAAACTCGCAAGG CTTTCTGCGCTTAAATTTTCCAAATTCGCCCTGAAAATTTAGACATAACCGCGCTTAAATGTCTCTGTTTAGAC ACCTTTTAGGCAATAAAAAACAAGTGAAGTCAATATGAGACTTTAGCCTTAAATCCCTATTGCGGTGGAAGAG GGCGAAAGATTAGGTTGCGCAACAGGGGAAACCGGGCAACGACTAGGGCGATTGCTCTTAGAGATCCATA TTGAAGAAAGATGAATGTATAGCGCGGAGAAAG	1554	VSENASQDEIKKSYRRRLARQYHPDLNK TKEAEKFKENAAAYEILSDEEKRRQYD QFGDNMFGGQNFSDFARSRGPSDEL DDILSSIFGKGGFSQRFSSQNSQGFSGF NFSNFAPENLDITAAALNVSVLDTLLGNK KQVSINNETFSLKIPIGVEEGEKIRVRN KGKTGRTTRGDLLLLEHIEEDEMYRRE K

HP0962	1555	AATCAGCGTGTGGTAAATCTTAGGGTGCACCCCTCAACCTTGGCCCAATACGAAAGAGGGTTGATAGAGCCTAGCAGGACTGATGGGAAATGCGCTTGATATCCCAACGAGACATGACAAAATCAAAACGATTTTACGCCCTTACAGGGATATGGGGTAAATCTTGGGGCTGGATATTAATCTTAAAGAAAGCTTGAATTAAGACAACTGAATTAAGAGAGTTGCAAGACGCTCTGCACAACTCTAAATACCAACCCCAACGAAATTTAAACACCCCTACGAATTTTACGAATGATTTATTTAAATAGGCTGACTTGCCTTTAAACCCCAAGCTAGAGATTTTATAGGCCAGCATTTAGTAGGAAAGACGCCCTTATTTAAAGCCCTACAATCCAAACATTTCCCTTCTTCTATGCCCTCTCTGGCGTGGTAAACAGCCTGGCTCAATCATCGCTATATGCTAGAGCGCCCATCTTTATTC AATGCGACGGATTTAAATAGAGGATTTGCGCTTAAGCTTAAATATCCAAATACCCCTTTTAAACCCGTTGTTTATTGATGAAACCCACAGATTGAATAAAACCCCAACAGAAATTTTACTCCCCATTATGGAAAGATCACGCTTTAATTTAGGGCTAGCACGCAAGATCCTA	1556	ISVAKILGVHPQTLRQYEKEGLIEPSR TDGKMRLYSQRDMIDIKITILRLTRDMG VNLAVDILRLKEKLDIENLNKELQD ALHKHSKNTKTPTKNI.NTPTNFYELIF KK
HP0962	1557	CAGGATAATCCAAACAGCTGAAAGAAAGAAATCAATCAATGGTGAAATATTCAGGATTAACATAGCGACAAGT TTATTATTAGCCGCTGTAGTGTGTGATATTGATAACAGATAGATTAGAAACAGAAAGAGGAGCTGAAAC GCTAGGGATAGAGCAACAGAGTGGATAGAACTGGAAACAGGAAACAAAGACCATTAAGAAACAAAGATTT AGTTAAAGAGCAGAAACAAATGGCAAGAAATCATGGCCATTTTATGAAGAAATAGGAATTAAGGGTGGCAT TGCTATAGAGTAGAAGCTGAATGCAAAACCCCTAACTGCAAAACCAATCAACCCCTATCCAGCCAAACACCC TCCCCAATCTAAACAAACCCCTCTCAAGAGGATCAAGAGGATCAAGAGGCTTATCGCTTATTTGCAAAAGAGTTAG AATCTCTGCCCTATTCAAAAGCTATCGCTAAACAGGATTAAGAGGCTTATCGCTTATTTGCAAAAGAGTTAG AGACCTTAGAGATTTAAGTTACAGAGGATGGCAAGAAATCTAAATACGCTCAAGCTCAAGCTCAAGCTAAAT GCTTGGAAATGAGAAACCCACAGCCCTTCAACCTCTCAAGCTTGTTCGTTCAAAATATTTGCTGATG TTAATAAGAAATAGAGCAGTTGCTAATACTGAAAGAAAGCAGAAAGCGGTTATGGTTATAGTAAAGGATGT AGGCATAAGAAATAGAACACCATAAATCGTTTTAGCTTAGGAGACATCAGTCAGTTCTTGGCCATAGAAAA TCGCTTATTAGCTTCTCCCTTTAAAGGGTGTAGTTAAGGTATAAGGAAACCTGTATCAAGTTTATTGGAATG GATTAGAAATCTGATTGGATTGACCCCTTACAATTTTCAACCAATCGTTAATAGCGATTAAATGACTATATACA CTACAACAA	1558	QDKSKQAEKENQINWWKYSGLTIATSL LLAACSVGDIDKQIELEQEKKEAENAR DRANKSGIELEQEKQKTIKEQKDLVKK AEQNCQENHGGFFMKLGIKGGIAEV EAECKTPKPAKTNQTFIOPKHLPLNSKQ PHSQRGSKAQELIAYLQKELESPLYSQ KAIKQVNFYRPPSSVAYLELDPRDFKV TEEWQKENLKIRSKACAKMLGNEKPT SPFNLSKPFVRSKNIC
HP0962	1559	CATTCAAGAGCTAGATGTGAATAACAAACCCCTACTCACCAACAAAGGGCTATGACTTAAACGCTTATTAGAGGCTAA AAACAAATGGATTCGAAGCCTATTTGACGCTTTCGACAGCATCAGCCGCGGTTTAAACACTACCCCTCAACGA TGTTTAAAGAAATTTGTTAGAAATTTACCGACTGATCCCAATATCCCTGAAGCGTTATCTATGCTCAAGACATT GGCACCAATGGATTAAAGAAATTTACCGACTGATCCCAATATCCCTGAAGCGTTATCTATGCTCAAGCTTTAGAG GAGAACACCATTAACAAACAGGCGCATGCTTATTACAAAGCCTTCTTTAGAAATACAAAGAACTCGCGCTACGCTCCT TTAGCCCAATCGTTTAGCCATTGAAGCGGCTGAAGGCTCTGATTGAGCAACGCTAACATGCTTTTAAAGAAAGC TTTTTCTAACGCCAAAGACAAAGAGAGTGCGAGTGAATCGCGCTTAATTGGGCTGAAGCAGAGATAAACTATCAAA ATTTTAAACGCTAAATACCTCATTTGATAAGGTGGTCCCAATCCAACTGATTATTTCTACGCATAGCGAATCAGC CCTAGACTTGCTCAAGTTATTGAAAAAACCAAGATGAATGCAAGCGGATTGAGATCGCTCAGTTGCTCCTCAATCA AGATGATGATCTGAAAGCTAAAGAGCAAGCGCTTTATGATTAGGAGCGTTGATGCAAGGATCAAGGAGCTTTAAAA CGCCACCTTTACAATCTGCAATATTGAGGAGCCATGCGGAATGATAAGCTTCTGCTTAGGGCGCGCGATG AAAAAGCCCTTTTTCATGGAGGGGAAACGCAAGAAATCGCCCACTATGACAAATCATTCAAATTTCCCTA ATTCTAATGAAGCCCTAAAGGCTTTAGAAATTGAAAGCCCAACTATTGTTTGAACCAAGCGTTATGCTGAAGTGTTAA GCATGCAAAAA	1560	IQELDVNNKPLLTKGYDLNAYLEAKK QMDSQAYFDALRTISRFAFNYPQTMF KKDLYLEIILGQLGIK'SLLIDIGTQWI KNYPTDPNIPEALYYVAKALDENNNHYK QAMRY'KRILLEYKNSRYAPLAQMRLA IEAEGSDLSNANMLFKEAFSNAKDK SASEIALNWAEAEINYNFNNAKYLDK VVQSNPDYISTHSESALDLLKLLKKNQ MNASAEIAHLLNQQDDJLKAKEQALYD LGALYARIKDFKNAHLYNLQYLQDHAE LDKASVVRARDEKALFMEGNTQEKIA HYDKIINFPNSNEALKALELKAQLLE NKRYAEVLSMQKNLPKDSPLIQKTLNV LAKTPLENHRCCEALKYLSQITTFEFS KEEIQAFDCLYFASLKEKAIQIILNAFT AKAPSEKLIWLRLGRNYYRLGDFKNS TLASKDALILAQSLNKE:FYDIAFVLFSD YMONNEKELALHLYAFLEKHFKGDKR MALVYFKLENEKOPKSVKIYATSLKL QDAYKDYSYTPFSEFALIDA

HP0962	1561	GGGGTCAATTACCCCTTTATCAATTCAAAACACCCCAACTACACCGAAAAATTTACGCCAGAGTTTAGAAAGTTTATATA GACAAGCATATAACCACTCTTTGAGCCGCTAGAGGTTTATAGGCTATATTTATGCGTTATGTTATCCCAAACTACCC GCAAGCGTTATGAAGACTTCCCTTAAACACGATTACCTTAAATCCTTTTACAAACAATAAAGATTGTTTAGGGCTTT AAGCCTTTATAGGATTGAACATAATCGGCTTGCATGCTTAAACCAAGAAAGCCCTGAATTACAGCTTTGGAAAAATTAA AGACGCCACCATAGGCGAATCCTGCTATAAAGAAGAGCATACCCCATCAAAAACCCCTCTCATAACGAGCCAG ACCAACGGCTTTATCAACCATAGCGCTTATTTAGGGGGTGAGTCAAGAAATTTATGATTATAGAAATAGGGGGT ATGGCGTTTAGACAAATATTTAAAGCCATAAAACGAGCCTTGCACCTTGATCATGTAACATAATCATTAAGT CATCGACGACGATTGAATCCAAACACGCTTGGATTTTAAACGAGCGATTGCCCCCATTTAAAGGGAATGACA GCAAGCCCTTAATGCAAGAAATCTTGCAAAATCCACCCCTCCCTCCCATTTAATACCAATATCGCCC	1562	GVNYPLYQKHPNNTENFTPEFRSFID KHYNHSFEPLVGLYIYALLYSPNYRK RYEDFLKNDYPKILFTNNKDLFRALSLL GIELGLHVLNQESLNYSGKLKDATIG ESCYKEEHNPIKKPSHNEPDQRLYINH SAYFRGVSEIYDYRIGGYGVLDKYLK SHKNEPCDFDHTVNIKVIARTIEIQKTL GFLTSDLPHLKGNDKSKALMQEILQNP PPPI
HP0962	1563	ATGTGCCCTTTGGGCAATACGGGAAAAAGCGCTTGACATTAGCATGTGAGAGAACAACTAGACAAGGATCATTAT TCCTTAAAAAGGCCTAAAGAGCGCATTTAGAAATACCTTGCCACCATGCAGCTTTTAGAAATGCGCCGCAAGAAAA GCCAGAAAAAAGACAAACTAAAGGCACGATTTTATGCTTTTATGGCCCTCCTGGCGTGGTAAACAAAGCCTTAG CTAATTCATCGCTAAAGCG	1564	VPFGQYGGKALDIKHVREQLDKDHYSL KRPKERIVEYFATMQLLEMRKKKPEK KDKTKGTILCFYGPVGKTSLSANSIAK A
HP0962	1565	CGCTGATCCTAGCACCTTCTAAAAAGAGAGCCGATAAGGGATTAAAAAGGTGTTCAAGACAGCAAAAAAGACGCTT GCGGGTTCATCTATGAGATCAGCGAGTTTATGAAAGCCCTATACCGCATGCTAAACAAACAGACCCGATACGCTAT TTATTGAGGTATCTCCCTCTAGGTATTGGCCAGCATTTTAAAGCACTGCTTATGTCAAATACCCCTGATTGAC GCTTTGAAAAAGCTTTTGGTCTTATTATACCAACTTGGATTGAGGAGGCGCATCACGCGCATCAAGCAAC CAGTATCAACATTTATCAAAACGTTAAAGCAATAAGAGCGTTGAACCATCAAGAGCTTATATTGAATAGCATCGA CTCTTAAACACCTTTGATCAATACCTCTATAACTTATGGGATAGCTCTTCTGTTTATCATAGCAAAATGGGTGCTCCT GTCTTAGCCCTAGCTAATTATTTTCATGGCAGATGAAGAGAAACCCCATTTTATCGCTATGATGCGGAAACCCAAAGTG GAGCATATTTTGCACAAACGCCCAAAAGAGGCGAGTCAATGGAACGCGGATTTTGACAAAGAAAAAGAGAAAGATG GGTAAATAATATCGCGAATTTAACCTTTTAAAGCGTAAAGAAAGCGCGCATGCTTTAAACGGGATTTGATGAAAA AAGAAAAATTTATGGAGGCAAGACACGAGCAAGTATTAGCTTTATGACATCACTAAAGAAATTGTATAGCAATTA TAGGAAGTGGAATGAGAAGTCCCTCCAAGAGCGATACAAATCTTTGTATAACACTATCACGCCCTGTTTACACATAGA GGGGCAAGAAGATGATTTGAAGATGATTTTGATCTA	1566	ADPSTSKRADKGLKVKFKDSKKDAC GFIYEISEFMKAYTALLKKQDRYVYLLR YLPSTRYWASILTTALYVKYDFDALKKL LVSYYYQTWAGGTTRIKQTSINIKNV KSNKSVETIKELILNSIDSYNTFDQYLYN LWDSSSVYHSHKWRPVLALANYFMAD EEKPHFIAMDAETQVEHILPQTPKRG QWNADFDEKEKEEWWNNIANLTLLKR KKNHALNGDFDEKRIYGGKDTSKVI SCYDITKELYSNYRKWNEKSLQERYKS LYNTITPVLHIEGQEDDFEDFDL
HP0962	1567	AAACGCTGTGCAACAGCTCAAAATTTCAAACTTTAGAGCCAGTATTTCTCAAATCAAAAACGGCATGATGATTTG AGCATGCAAGATAGCGAATGCTATAAGCGTATGAGCTTTATCAAAACCGCTCAAAAAGACAAATTTAGTGATTTT GACGATTTGCTTTTAAAGCTTAAAGATTTTACAAGATAATGAACCATCGCCAAAGAGACTAGCGAGCGCTACCAAC TACATTATGGTAGATGATCAAGACACGACGCTTGAATGGAGTTTAAAAAAATGAGTTTACGCAACCAT AATTTGCGTGGTGGCGATGACGATCAGAGCATTTATGGGTTAGGGGGCTGATATTTCTAACATTTTAAATTT TCCAAGCATTTTAAAGGGGCTAAATAGTGAATTAGAGACGAACCTACCGCTCTAGCGCTGAAATTTTAGCGTGCGC TAATTCCTCATCAGCCCAACCAACACCGCCATATTAAACGCTTCAAAGTTTCAA	1568	KTCLKQLKISNFRASISQIKNGMMDLS MQDSECYKAYELYQNALKKDNLVDFD DLLFLSLKILQDNETIAKETSERHYIMV DEYQDTNALQLEFLKLSFTTHNLCVV GDDQSIYGFRGADISNILNFSKHFKG AKIVKLETNYRSSAEILACANSLISHNQ HRHIKTLQSFK

HP0194	1569	ATTTAGCCAAAGTTAGGGCTTAATGAAGAGAGATAAATAAATCTTTTCGTTGAATTAGAAAATTCAAACGCCCTAGAAATT TGACGAAACCAACAACGCTTACAAAATCATTCGCCCTATTTGTGAGACGATGCAAAACAATGAAGAAAGGATAAAAGA CTTTTAAAGCGATGAAGATACACGCCGTTTAAAGCGCTTTAAATGGCTGAAATCCAAACCAAGCGCGATCA AATTATAACGCTAACCAACCTCAAGAAAAAGTTAAATCCGCCAAATTTAGCTAAGGAATTTAAGAGTTGTGGCA AACCATCAACGGCGCAAGCCAAATTAAGCTATCAAAATTCGCAAAACCAAGCTGATAGATCTATCGCCAAAGCGTT TAATGAGAGCCATGTGAGTGTGAGGTAAATCAATTTGAAGCAAAAGGTATGACCCCAAAACCAACAGGATCATCA CAGAGCAATCAAGCACCTTAAATCAGAGACTACGCTAACGCTTACAAAAGAAATCAACGCGCTTTTGTGACT TTGCCAAAGATGAGCGCTTAAATTCACGCTTGAACCTTAAACAAAGAGCATTTACAAAAC CACCCAAAGAGCGCTTAAATTCGTTAAAGGCATCATTAAGATAAGTTGCATGAAAACCTGCTTTCTGCGTGAGTTA TGGAATTTGCCAAAACGCCCTTTCTAACACGCTTTTATGATAAACCGCATCCGCTTATTTGTGAAGATGGCTCGCCCA AAATGAGATTGAAAAACACAAAATAGGCAATACAAAAGTGGCAAACTCCAAAGCCCAACTATCTTTATGAGACGAT CATTTATGATTCTAAATTTGAAGAAGAGTGAGTGAAGAGGGGTGCAAAACACTGGAAGGTAAAGCATAGAAGTTT TTGCCAAGCTCCCTAAATTTAAATCCCAACGCCCTTATAAAACTATGAGCCTGATTTTGTCTTATTGCTTAAAGATGA AAAGGGTGC	1570	LAKGLNEREINKLFVELENSNALEFDE TNNAVKIAPICETMQNNEERIKDFLSD EEYHVLFAFKMAENPTNKRQDIINAN QPQEKVIRQNLAKFELWQTINAAQS QLSYQNIQKTKLIESIAKAFNE:SHVSAE VIKESKRYDPQTNRIITEQS:STLKIRDY ANALQKEINALLLDFAKDERLPLKFTLE LYNALNKEHFTNSPKKAFKLLKGIKDK LHENLLSCVSYGFCQNAFNTAFDKTD PLYCEDGSPKNEIEKHIGIKYKSAQTP SPNYLYETIYDSKIEEEVSEEGVQTL GKSIEVFAKLPKFKIPTPYKN'EPDFAY LLKDEKGAKEFFVCEKGYEKESDIPPD EKRIEYAKKFFETLSQNLKNAKKEIRV VFATRINKQDLFNTLKNALKEIP
HP0194	1571	GATTTTGTGAAAGCGCCTATTTGGGGTTTGAACCATTCATAAAATGCGTTTGCAAAAGATTGATGAATCTTT TTGCGTTTGAATAGCACAGAGAGATTCCGGTGTCTTTCACGCTGGTCAATCCCTTTCCTTAAAGAAATACGAA TTTGAAGTGCCTACCCCTTTAAAAATCCTTTTAGAATTAGAGGGAGCCAGAGCGTTCTAGTCGTAAATCATGTC GTTGAAACCCCTTATGAGCTTCCACCGTGAATTTATAGCCCTTAAATTTTCAATTTGGACAAGCAGCTCATGGG CAAGTGGTTTGGATTCTAACAAATACCCACACTACCATTTAAGAGAGAAATCTAAGCCACACGCGATGAATGATGC ATAAGCGGTTTCTATGCAAGCGTTTCTTGAAGCTTATGGCGCAATGCATCGGTGTTTTCGCAATACAAAGCGGCG GTTTCTTATGGTATAAGCGGTTATTTTGAATACCAACGCTAAATAAGCGCTTAAATTAATGAATCCAAACAA GGAGTTTATTTATGGAACAAAGCCCATCAAACTTCAATCTCAATTTTTATAGAGCATATCTTACAAATCTACCTCA CCGCTATCCCATGCTTTTATGATAGTAATTA	1572	IFDVKAPILGFETIHKMRLQKIIEFLRLN STEENSVVSTLVNPFALRKYEFVPT PLKILLEGAKSVLVANIMVVTPIELS TVNYLAPLIFNLDKQLMGQVVLDSNKY PHYHLRENILSHTHE
HP0194	1573	CGATGAAGTCAAAAGAGGCTCAAGAGAGAGCAAAACGATTAAATCTGCGAGAGACGTTTGGCAAGCAGCCAAATCCCAA GCCACTTTAGCCAAAGAGACTTATAAGCGGTTCAAGATTGTATGATAATGGCGTGGCGAGCTTGCAAAAGCGCGGA TGAAGCCTATGCGGCTTATGAAAGCACTAATACACGAGAGCGCGCTTACCAAAAGTATAAAATGGCTTTAGGGG GGCGAGCTCTGAAAGTAAGATTGCCGCTAAGGCTAAGAGAGAGCGCGCTTAGGGCAAGTGAATGAAGTGGAGT CTTATTTAAAGACGTCAAAGCGACAGCCCAATTGATGGGAAGTGAAGTGCCTTTTAAAGCGGTGGCGAGCTT AGCCCTAAGGGTTTCTGTGTTTAAATGATAGATTAAAGGATAGTTGGTTAAAAATCAGCGTGCCTGAAAAGTAT TTGAACGAGTTTAAAGTGGGTAAAGGATTTGAAGGCTATATCCCGGCTTGAAGGCAAGCAAGCAAGTTCAGGGTCAA ATATTGAGCGGTGATGGGGATTGCGGACTTGGAAAGCGAGCAATAATCCAAACACTTACGACATGAAAAGCTATG AAGTGAAGCCATACCTTAGAAGAGTTGAAAATTTAGGGTAGGGATGAGCGTGTAGTTACCATTAACCTTAAA AAGGATTGTTTGTTCAGATTGATAAGCGCATGGGTTTACAAGACAAGTTCTGTGTTATCGTGTGTTTATATGCTT TTTTGTTAGGGTTTAGGCACGCAATCTTTAAACAGAAATCCCAAGACAGCTCCCTATCGTGTGTTGATTG GATAAGACCACGACAGCCATCAAGTAGCGTTTGAATAGGTGCAACGAGCGCTTCAATCAACACCAAGTGG CTAGCCTTTTAGAAGCCAAACGCTTTTAACTCCGCCGGAAGCGTATGGGGCTTAGTTTGCCTAGAGATTAGAG AAAAAATCAAAATGGGGCGAA	1574	DEVKGRSRDETINSARDVWCAAKSQA TLAKETYKRVQDLYDNGVASI.QKRDE AYAAAYESTKYNESAAAYQYKIMALGGA SSESKIAAKAKESAALQOVNEVESYLK DVKATAPIDGEVSNVLLSGGELSPKGF PVVLMIDLKDSWLKISVPEKYI.NEFKVG KEFEGYIPALKKSTKFRVKYLS:VMGDF ATWKATNNSNTYDMKSYEVEAIPLEEL ENFRVGMMSVLVTIKP

HP0194	1575	TCAAAACTCTCCTTAAAAACGCATGGACTAGGGTATTGTCTAACCATGAAGGCTTGCATGCGCAAGAAATACGCCCA TTAAGCGAGCGAGTAAATGAAATTAGCGGCTAAACCTTCTTTTGGCTCAATGATTGAGCGCTTTTATGTGTGTA TCTCTAACCCCATTAATGATTTTCCAGCCAAAACACCGGGCTGCAAAAGCCACCAACAGATCCATC AAGGCATACAAAACATCCAGCAAAATATCCCTTCTCAAGTATTAACCCCTCAATCCAAGCGGCATGCAAGGGGTG ATGCAAGGTTTGGGGCTTGGAGCAGCATTAGAGCCCCCTTATTGTTCTAAGCAAAATGTGGTATTGGGGC TTTGAGCATTAATATCCCTTATATGGGTGGGCAAGATTCACGATGGTGGCATTCGGATTGATGCAAAAAGA TGCTAATGAAGTGATCGTTGAAAAAGCTTCCACTTTCAAGAGCTTGAGCGTGATTACGGCATGGTGTAA CGCAGAGTGCGTGAACCTTTAGAGAGGTGGAAAGGCCATTATAGCATTTCCAAAACGCTTTGAAAATGCAAA AAGTGGGGCAATCGCTAGGGTAGAAACCTTAGCGCTCAAGTGCTTATGATAAGGCCCATATCGCTAGCGTTAA GGCTAAAGACGTGTTAGAGTTTCGAGCTCTCGTTCAATTCATTTATCTAGCAAGGACGATTAGTGCCTCAAG CAATTAGAGATCGCAGGAGAAAATCTGCCGATCTGAGCTTTTGTCTTCCACGCTCAATTCCTACCCGGT TTTAAAGACTTTAGAAAATCAGATTCAAATCTCTAAGAAAACACGAAATACAGATCGCTAAATCTTGCCCCAAGTG AGTTTTTTGGCTCTTATATTATGAAGCAAAACAATTCGGTGTGTTGAAGACATGATCCCTAGTTGTTGTGGCGGTG GCCGGCGCATGCCT	1576	IQKLSKNAWTRVLSNHEGLHAQEYAIK RASKMKLAAKLSFLPOIDLSAFVYVLSN PIKMDFASQKQPGVQKATNQIHQGIQIN IQQNIPSQVLTPOIQAGMQGMQMGFG ALSSSTLEAPLLFSKQNVVIGALSIIPLY MGGARFTMVRIADLMQKDANEVYRLK KLSTFQELVSVYYGMVLNAEVAETLEE VEKGHYKHFNALKMQKVQIARVET LGAQVAYDKAHASVKAQKDVLEVSQLS FNSILSSKDDLPSSSKLEIRTEKNLPDL SFFVSSSTLNSYPVLKTLLENQIQISKENT KLQIAKFLPQVFFGSSYIMKQNNVSFE DMIPSWFVGVAGRMPILSPTGRIQKYQ ASKLAELQVSSEQIQAKKNMELLVNKT YKETLSYLKEYKSLSSVELAKENLKQ EQAFLOGLSTNAQVIDARNTLSSIVE QKSVAYKYIVSLANLMALS DHIDLFYEF VY
HP0042	1577	TTAGGCTGTATGATGAGCATTCTTGCTCACTAAAAACGAAACCTTAGTGGCATCCTCGTTAGAGGGGTAGC TACACCCATTAAAGCAGACAGCAATTGCAAGATCTTTACCGAGCGCCAGATGGCTTGATCTTTAGAAAAAGT CGTGCGCGCTTGTTGTTAAAGCGGTAAATGATCACCACAAACATCAATCTGATCTCAATCTGCAAGC GATTTGAATCAATTGAAACAAAGAGTGATGAAATCAGTATTTTAGTTTAGAAGCACTCACTCTTTCAT GGCGTTTGGAGCATAGAAAATCTCTCATGCTGCTAATAGGAAATTTAAGGATATCTCTCTATAAAGCG CATTTTTGCAGAAACCTTAAAGCTTAGAAATCCAGCTCAAAATATGCCCCAAACTCTTAAGCTCCAAAGAG GTTTTGAATTTTATCGGGAATACATTATGGTTGATCTCCCTTAAACCTTAGTAGGGGTATTGAGCGAT AGCTATATCGCTAGTTCTACCTTTGAAAAGATATTCTTCAAGAAAGCTTAAATCAAAAACCTACAAACCGCT TGATTGGCATTAAAGCTTATGAGAGCGAAAGGATCACTTCTATAGCGATCGGAGCGCTTTATACCAAGAAACGCT TTAGATAATTCTCTCTATAGAGCTATGAGTGTGCTAATAACGCTGAGTTTAAAGAGAGAGGCGCAAGTTTAGC ATGTCCAATCTCGTTAAACAGAGCTATTAGATAACCAAGAACTGGTCAAAACCAACGCTATCCATGCAAAAATTC GCCCTAAACATTCTTATCAAGCCCTAGTTTAGAGAAATTAGACGCTCAA	1578	LGLYDEHFLTKNENLVGILREGVSYT HLSTEQLQDLFTERQMALDSLEKVVAR LVVKRRKIDHQNIQSDSQYLQAILNQ FENKEVYENQYFLVLESTHSLHGVLEH KKKSLMHANRENFKDILSYKAHFLQET LKSLEIQKNYAPKLLSSKEVNFYAEY NGFDLPKPLVGGYLSDSYASSITFEK DYFIQESFNQKTYNRLIGIKAYESERITS IAIGALLYQETPLDIIFSIEPMSVHKTLF LKERAKFSMSNLVKNLELLEYQELVTK RLSMQKFALNLIKAPSLNLDQAQ
HP0042	1579	AAATTTAGGGCTAAAGAGCCCTAGGAATTTTATCTTAGAATATATAGAAATAGTCAAGCCATAAGCCAGAAATT TTTATCATTGAAACCGTGAAACCTCATCTCTGGCTAAGGCTATTTTAGAAGAAATTAAGAAAGGTTGAACG CTTTAGGGTATCAATTGAGCTATCAATCTTAACGCTAAGATTATGGCTGCTCAAAACAGAGAGAGCCTTTA TTGTAGGGCTAGTCTGTTGATTTGATTTCAATCTTTAGAGCTTCTCAAGCGTGAATGTTCAAGATGCCATAA GCGATTAGCCTATCTTGTCTAATGAGGGGCTTTGAGAGCGATTATTAACCCCTATCCATCAAGCTATCAAG CTTTAATCGAAAGATAGCCCTAAATTATACAACCATCAAGCCCAACCACTCGCAAGCGCTTAGAGAAATTA AACTCATTAACAAAGAAAGCAAGGCAAGAAAGCTTGGCTTAAACCTTGCATGGCAACAGCAATTCAA AAAAAGATGAGATCAACCGGAATCTTTGGTGGTTGAAAGCATTGATTGATCAACAAATCAACCCAGATTTTTAT TTAGAAAATGTCCCTAGTTTATAAACAGGTTGTATAGACAAAATGATAATTTGCTAGAAATAGGATCTATGATA GAGCAAAATTTGAGTGGCGATTATATGCTCTATGATGAGGTAAATCAATTTTAAAAATTTGGAGCTAATCAAGCCGA ACAAGAACTTTAGTGATAGGGTTTGAAGAGTTTAAAGATTTTAAAGCGGTTAGAAATTTTCTGATTTCAAAAC AAGAAAAACCTTAAAGAAAGTGATAGGATCGTTAAACCACTTGTGGGCGGATGATGACAAACACGGAATTTTATC ATAGTTTATAGAACTTATCCAAAGCATATGCAAGATGG	1580	NLGLKDPNRNLFLEYIEIVKAKEIFIEN VKNLISCAKGYFLEEIKERLNALGYQLS YQILNAKDYGVQPNRERAFIVGASRFS FDNLLPSQSVNVQDAISDLAYLCSN EGAFESDYLNPQSSYQALMRKQSPKL YNHQATNHSQAALKLINKEQGKEC LPKNLHGKQF NDEIKRNSLVESIDLIKQIKPRFFILENV PSFYKTGCIDKNDNLLIGSMIEQNLSG DYMLYDEVINFKNFGANSRTRTLVIG VCKEFKDFISALEFFPQFKQEKTLKEVI GSLKPLAWGEYDNTDFYHSFRTPKH MQEW
HP0042	1581	TTAGAAAATGTCCCTAGTTTATAAACAGGTTGTATAGACAAAATGATAATTTGCTAGAAATAGGATCTATGATA GAGCAAAATTTGAGTGGCGATTATATGCTCTATGATGAGGTAAATCAATTTTAAAAATTTGGAGCTAATCAAGCCGA ACAAGAACTTTAGTGATAGGGTTTGAAGAGTTTAAAGATTTTAAAGCGGTTAGAAATTTTCTGATTTCAAAAC AAGAAAAACCTTAAAGAAAGTGATAGGATCGTTAAACCACTTGTGGGCGGATGATGACAAACACGGAATTTTATC ATAGTTTATAGAACTTATCCAAAGCATATGCAAGATGG	1582	

HP0042	1583	TCATTGATGGCAAAAGAGCGCTCTATGGCGGATTGCGTGGCAATTTGTCATAAAATTCAGGGATCAGG ATAGATATTGGAGGGGTAGCACCAGTGGCGTTGATTGAAAGGCAAGATTAAAGCACTTAATCTCGCTTATGAT TGGACGATTTCGATTAAAGAAATGTTTATAGACAAAGACTTAGAGGTCAAAATGGCTAAAGCCTTTATCCAAAAGA AGTCTCTAAACTGCCCTTTAAACACAAAAGCGCTTTGGGTGGGGGACGATCAGAGCGTTGAGTAAGGTATTG ATGAAACGCTTTTGTACCTATTGATTCTTTGCTATGCTATGAAATAGATGCACATAAAATTTAGCGTTCAATTGAAA AAATCGTCATGCTCAAGAGAGATCAATACGGCTTTTAGGGTGAATGAAGAGCGTTTGGATAGCATCAGGAGCGGG CGGTTGATTTATCAGTCGTTTGGAGCATTTAAACATTTTAAATGATCACTAGTGGGTGGGTGAGAGAAAG CGTGTGTTTGGAGGATTTATGGCCCATCATTACCAATAATCCCGCAATATCAACCCCTCTCTCATCTTTAA GATCGCTTTTGGCCCATGAAAGCAGCAGCCAAAGGTCAAAAGAAATGCGTGAATTTGTTGAAGCCTTATCGCC TTTGCAATAAATAGATGAAATAACCTTTTCCATTTAAAGATTGCGGGGAATTAGCGAGCATGGGTAAGATTTAAG CGTCTATTAGCCCAAGCAGCAGCGCTATTATT	1584	IDGQKEALYGGIACANLLHKNSGITIDIG GGSTECALIEKGKIDKIDSLDVGITRIKE MFLDKLEVKLAKAFI2KEVSKLPFKHK NAFGVGGTIRALSKVL MKRFCYPIDSL HGYEIDAHKNLAFIEKIVMLKEDQLRL GVNEERLDSIRSGALILSVLEHLKTSL MITSGVGVREGVFLSDLLRHHYHKFPP NINPSLISKDRFLPHEKHSQKVKKECV KLFEALSPLHKIDEKYL FHLKIAGELAS MGKILSVYLAHKHSAYFI
HP0042	1585	GCCCTATATCGCTAGAAATTATCCTTTGAAAAATCCGTCCTCAAGAACCGCATGAAGCCCTTTTGGGGGGTTA AAGGCGATGAGATCTTAAAGAAATCGTTTTTAGCCGCTAAATTAATAATCCCTTTTGGTTGTGAATGGGGTA TGACCAAGTTGAAAGCTTGAAGAAATGCTTGAATTTGCGGTTATGATCGAGAGTTTACAAGGATTTGAGCGGCTT TGATAGAGGTTTGTGGCGTTTTAAAGTTTTTAAAGATAAATTAACCTTAATTACCC	1586	PYIARNYPLEKSVLKEI2HEALFGGVKG DEILKEIVFLAAKLIKIPFLVCEMGYDQLK SLKECLEFCGYDAEFYKDLSGFDRGFV GVLKSLR
HP0042	1587	TGCATGAAAAATACCTAACGCTTTTGATGTCTATTTTGCTTAGGGTGCTATACCACAGAAAAAGCCCGTAGAGG CTTTAAAGCCTTGATACGCTTTGAAAAATAAAGGGAGCTGGTGTGGATACCTTAATCATTGATCGCCCTTAG ACATCGCCCTTTGCCCTAAAAAACTTATGCTAAATGAAAAATGTTATTTATCCCGAGTGTAGCGGTTAAAGG GTGGTGGAAAGGTTAGGTTTGAATAATTTGAGATTTTAAAGACCCAGCCCTAAAGAACAGCGTAA CGGATTTTATTTGGGCGAGAGTTTGAAGATTTTGGATAAAACAGATCCCTCTAAACCTTAAAGGGGTATGACG CCCCTTAAGGGGTTTAAATGCTTAAACCAAGCAAGCGTTAAATAAGGATTAAGATAGTGAAGAAATCAGTC GTTCTGTGGATTATGACTCTTTAGAGACTTTGTAAGAAATTTCAAGCCAAAGCGTTGGCACTGAATTAATCGTTTTGGAA AAAGATATAGCCCATGCGGCTTTCAAGGGTAATGAAAGCATGGGTATG	1588	HEKYPNAFDVIFCLGVLYHRKSPLEAL KALYHALKIKIGELVLD2LIDSPDLALCP KKTAKMKNVYFIPSVSALKGWCEV GFENFEILSVLKTTPKE:QRKTDIFILGQS LEDFLDKTDPSKLTLEGYDAPLRGYFKM LKPSKR
HP0042	1589	ACTGGCGACAGGGGACGATTGCAGGGAGTGGTGGAGCGCGAGTTTGGGTAGTTATAAGAGTGGTGAAGTGGG CATCAAGAGCTTTTGAAGGCTATCCCTAGTCTTAACAGACTCGCTCGCATTCAAGGGGAGCAGATTCTAACATCG GCTCAAGACATGAATGAAGAGGTATGGTTCAAGCTCGCCAAAGTGCCTCAAGAAATGCTAGATGATAGCGGTATT CAAGCGGTGTCATCACGCTATGCGACGACACTTTAGAAGAGAGCGCGTATTTTAAACTTAGTTTACGCTCCAC AAACCGGTCGTGCTGGTGGAGCGATGCGTAATGCTGC	1590	LATGGTIAGSGASASLGSYKSGELGIK ELLKAIPSLNRLARIQGEQISNIGSQDM NEEWFKLAKRAQELL DDSRIQGVWIT HGTDTLEESAYFLNLVLRSTKPVWLVG AMRNA
HP0042	1591	AGATGAAATTTAGACTCTTTGGCAGAAAAATATGTGGAGTATAGTTTATACGCTTTGATTGATCTTTAGCCGCA GAGCATAGCGCTAGAAATGACGGCTATGGATACAGCGACGAATAACGCTAAAGATTGTTGTTAAACTTTAACCATTTCT TATAATAAGCCAGACAAGAGCGGATTACGA	1592	DEILSLAEKYVEYSLYALIDSLAAEH SARMQAMDTATNNAKDLVKTLTISYNK ARQEAIT
HP0042	1593	AGACAGCCATTTGAAAGAAAGGGTAGCGTGGAGTTACCTAAAGATATGAGAGTATCAACAGCCATAATCTCTATCT TTACGTGAAACATTTATTTATCTTCTGCGCGCTAATACCGCTAAAGTAAACCGCGCTGAAGTGAGCGGGGCGG GTAGGAAGCCTTTGGCGCAAAAGGGGCGGAGGCCAGAGCAGGAGCATCACTTCGCCTGTGTTGTGGGTG GGGTGCTCTCATGGGCTACGAATAACCGCAATTAACACCTTAAATCAACAAAAAACAACCGCTGGCTTTA GAATACGCTTTAGAAGAAAGCGCAAGCGGAATAAGCTTTTGTGGTGAATAATCGCTATAAAAGCGGTGTTGA AGACAATAAAGGAAGCATTTGACTAAAGAAAGCCAAACCAATGTTCCAGGCTTTAGAGCAACGAGACACTTTGTTGT GTGCATGAACATGGACGAATACACCGAGTTAGCCTTTAGTAACCTTAAAAATGCTTATTGTTGATGTGAGCGAGTT AAACGCTTATCTTTGGCGGCTTATAGCTGTGTGATGGAAGAGCGGCTTTCAGCATGTGGTCAAGATAAGA CAGAGGAGTAAAAATGGCAGACATCATGATATAAAGTCAATCTTTACACTGAAAGTCATTAGGATTGCAAGAAA AAGGTGTTTAGTGGTTCAACCGCTCAAAATGTAACCAAAACCGCTCAAGAGGTGTTTAAACCTTACTTTGGCT TTGAGCCTTTGAAATCAATCTTTGAAACAAGAGGTAAAGGTGAACCGCTTAGAGGGAGCTTGGACAAAGAAAG TCGTTTAAAGAAATTTATGTGAAGTTCCAGAGGGCGCTAGCATTCGCGCCCTTGGTGTCTTAAGAAAGGAGAAAGCGG TTATGGCGATTAAACCTTATAAGCCCTACACCCCAAGCAGACGCTTCATGTCGTTGTTGACTCTAAAGACATTACC GCAAAAGCAGTGTCAAGG	1594	DSHLKEKGSVELPKRYESINSHNLYLY VKHYLSARANTAKSK2NRAEVSGGGR KPWAQKGGGRARAGSITSPVFVGGGV SHGATNNRNYNLKNK:KOKRLALEYAL EEKAQANKLFWVEKIAIKGWEDNKRK HLTKEANQMFOALEQ RDTLFVCMNMD EYTELAFSNLKKCLIVVSELNAYLLAA FSSVVMEEAAAFQHVVDKTEE

HP0042	1595	GCGTTAGAAATGATCCCTAAAAAGCCAACTTATGATTTAGATAAAGAAAAATGCGTGATAGAAGCCCTTTCGTTTT AATGACAGGGTCGCTAAAAACGATATTTAGGGCATTGCTCTTAATATTACGAGCATCAAGAAGAGGATTTGGAT TTTAAGGGATTGTAGACATATTAGAAAAGATTTTATTTACCAACACAAAGAAATGGAACACAAAAAATCAAAAT CATCAAGCGATTAAACGCCCAAAAGAACGCTTGAAGAAAAATAGAAAACTAGAAAGATCCTAAAAATTTACAATT AGAACGGAAGAAATGCAAACTCAAGCCTCATTTGCTCACTTACCAGCATTAATCCATAGCATGAAGCCGCGT GGTTTAAAGGATTTGAAGATAAAGAACGCGCAATTGAAATGATAAGAGCATGCCCTTAACGCTTTTATCAATAAA AAATTCACCTCAGTAAAAAAGAAAAAATCGCAATTTTGTATTAGAAAGAGAAATTTGAAGAAAAAATCG CTTTAAAGAAAAATCAATCAACTATGTTAAAGGAGCGCAAGAAAGCGTTTGAAGAAATGTTATGCCCTCTAAAAA TTCTAAATCAACGCCCTATGAGCGGTATGAAGTGTATTATAAGGATTTTAAATCGGT	1596	RLEMPKKANLMILDKKCVIEAFRND RVAKNDILGALPPNIYEHQEEEDLDFKGL LDILEKDFLYQHKELEHKKNQIIRLNA QKERLKEKLEKLEDPKNLQLEAKELOT QASLLTYQHLLHKHESRVVLKDFEDK ERAIEIDKSMPLNAFINKKFTLSKKKKQ KSQFLYLEEENLKEKIAFKENQINYVKG AQEESVLEMFMPKSKNSKIKRPMMSGYE VLYYKDFKIG
HP1493	1597	GTTACGCTCAAAACATGATAGTTTGGCATCGCTGTTGATTTCTAATCCTGCTTTATTTGGATTGGATAACCA TGGTATTCCTAATGACATTAATGATAATGAAGAAGCGCCCAAAACACTCCCTTAAAAAATACGCTAAAAATTTGAG CGCTTTAGCCCAAGACACGCTTTAGATCCAGTCATTGGCAGAGAAAGAGATTTAAGAGTGATAGAAATTTTAG GGCGCAGAAAAAGAAATAACCCGCTTTAATGGCGAAGCGGTAGGGAACCTCCATCGCTGAAGCTTTGGC TTTAAAAATCGCTCAAAAGAAAGTGGCGGATTTTGAAGAAATATGAAGTCTATTCTTGGATTTAGCCTTAATGGTG GCTGGGCAAAATACAGAGGGGATTTGAAAAACGCTTGAAAAAACGCTCAAGAAATCCAAACAAACGGCCGAT CATTTTATTCATTGATGAATCCACACCTTTTAGGCACAGGAGCAGTAACGCTGGAGCTTGGATGCGCGGAATA TATTAACCGGTTTAAACGGATGGAGCTTGAATGTTTAGGAGCGACCTTTGAAGAAATACCGCAGCGTGT GAAAAAGACAGAGGCTTTTATAGCGCTTTTCAAGTCAATAAAGTTGAAGAGCTTCTAAGAGAGCGTGTACTTGATT TTAAAAAGATCGCTCCCTTTATGAAGAACACCAACGAGTGGCTTATGATGAGAGCGTGTAAAGCATGCGTGGA TTTAACGAGTGATGATGATAAATCTTCCCGGATAAGCGATTGAATTTAGATGAGTGGATCGAGGAA AAAAATCAGCCCTAAAAAGGCAAAAAATCGCGTTGATGATGTGAAGAAACGCTCGCTCTAAAGCTTAAATCC CTAAATGCGTTGAGCAGCGACAAAAAGCCCTTTTAAAGAAATTTGAAAAATCGCTTAAAAATAGATTTTGGCCC AAGCAGAAGCGATCAG	1598	YASKLMDSFGIARLYSNPALLDLNHHGI PNDINDNEEAPKNTPLKYYAKNLSALA QDNALDPVIGREEEILRVIEILGRRKKN NPLLIGEAGVGKTSIAEALALAKIAQKEV PEFLQYEVYSLDLALMVAGAKYRGDF EKRLKTLKEIQNGRIILFIDEHTLLGT GSSNAGSLDAANILKPVLTGSLKCLG ATTFEYRSVFEKDKAFNRFRFSVIKVE EPSKEACYLILKKIAPLYEEHHQVRYDE SVFKACVDLTSDYMHDKFLPDKAIELL DEVGSRKKISPKKGGKIGVDDVKETLA LKLKIPKMRLLSSDKKALLRNLEKSLKNK IFAQAEAISLVSNAIKIQHCGLSAKNKPV GSFLVGPSPGVG
HP1493	1599	CAAGAAACGCATGAAATTAATAATCTTACTGAGTGGGGGAGCGGGAACGCTATGGCCTTAAGCCGTAGC CTATACCTTAAGCAATTTTAAAGCTTTTGACCATAAAAGCTTTGTAATTGAGTTTAAAGAAACGCTTCTTAGT AGATGAACCGCTCATTTGTGCAATGAAAGCATTTTGTAGCCCTAGAGAGATAAAGAAATGAATCAAAACAA AAGCGTGGTTTTTATTAGAGAGCTTGAATAAACACCGCTAACGCCATCGCTTGAAGCGCTTAAATGAGCGATA AAGAAATTTGCTCATCGTTACGCCAAGCGATCATTTGATTAAAGACCTTCAAGCGTATGAAACGCGATAAAAAAG CGATTGATCTAGCCCAAAAGGTTTTTGTAGTCACTTTTGGGTGAGTATTGACAAAGCCCAACAGGATTTGGGTATA TTGAAAGCCCTAATGTTTATGATGTCAAGCGATTGATGAAAGCCCAAGCTAGACAAAGCGATAGATTTCAAAAA GCGGGGTTTTTCAATAGCGGCATGTTTGTCTTCCAGCGGGCGTTTTTGTAGACGAACCTAAAGCATGCC CCACTATTTAAAGGGGTGTAAGAGCGTTTGAATCTTTAGAAACGCGTATTTTGAAGAAAGATCGCTCGTTT GAGCGAAAGAGCATGCAAGATTTAGAGACATGAGTATTGATATAGCCTTAATGCAACAAAGCCACAAATCAAAAT GGTAGAATTGAACG	1600	QENA
HP1493	1601	AGCCTATCTTTGTTCTAATGAGGGGCGTTTGAGAGCGATTATTTAAACCTATCCAATCAAGCTATCAAGCTTTAAT GCGAAAGATAGCCCTAAATTATACAACCATCAAGCCACCAACCTCGCAAGCCGCTTTAGAGAAATTAACACTCAT TAACAAAGAAACAGGCAAGAAATGCTTGCCTAAAACTTGATGGCAACAGCAATTCAAAGCACATGGGGCGCC TGAATTGGAATAAATCAGCCCCCACCATAGACACACGATTTGACACTCCAGCAATGGCACCAACTCCACCCCGAA TTGCACCGCTCTATCAGCCCTAGAGAGCGGCTAGGATACAAAGTTTAGCGATAATTATCTTTATGGCAATAAA ACGAGCGTTTGTAAAGCAATCGTAACGCTGTGCTCTCTTAGCCCTAGCCTTAGGCAAGCGATCTTAAAA	1602	AYLCSNEGAFESDYLNPQSSYQALMR KDSPKLYNHQATNHSQAALKLINK EQGKECLPKNLHGKQKQFSTWGRIN WNKISPTIDTRFDTPSNGTNSHPHHR SITPREAARIQSFSNDNYIFYGNKTSVCK QIGNAVPPLALALGKAILK

HP1493	1603	ATGGCAAAGACTATTACCCCTAAAGCCAAAGTCTATTCCAGCAAGATAAAACGCCCAAGAGCCCATGAAGCG ATCAGGCCACCTCTATTATTTAGAGCCAAACGCTTTAAAGACTACCTTAAGCTGAAGATTAAGGCTCTATACC TTAATTTACAAACGCTTTTAGCTTCTCAATGCAAGACGCTCTTTTGAAGCCAAAGCGTGTGTTGCTTGCAGAA AAAGCGAGTTTAAAGCGAGTGGAGAAAGCTCTTTTATGAGCTATTATAAAATTTAGGCAATGACGATAAGGA CAATGCTCCCAATTTGAAGAAATGACCCCATTAATAGAAAACCTAGAGAGCAACGCCCATGTTACAGAACCC TCCAGCACGCTATTCTGAAGCGAGCTTATTAAAGTTTGAAGTTTAGGATAGGCGAGGCCAGCACCTACGCCCT CAACGATTTCCCTTTTACAAACAGAGACTACATCAAGGTAGAAAAGCAAAATCAGTGTCTTAGAGAGCGCTTTTA AGGTGATAGAAATTTAGAAAAGCATTTTGAAGAAATCGTGGATCCAAATCAGCGCTTCTTAGAAGAAAGATTGG ACAATATCGCTCAAAATAAGCCGACTACCAAGCAAGTCTTAAAGGACTTTTACTACCCCTTATGCGGTAAGG CTGGGAAAAGAAATATCATCTCTCAAAAAGTGCAATGAAAACCGGTCAATCATGCCCTAAATGCGGTGGGAAATTA GTCAAAAAGAAATAGCCGTTATGGGAGTTTATCGCTTGCAACAAATACCTAAATGCAAAATATGTCAACAACTGAA AGCGCTAATGATGAAGCCGATCAAGAAATTTGTGCAAAAATGCGGAGGGAATGTGCAAAAATTCAGCAGAAACG GGCGCTTTTAGCTTGCAACAATTACCCTGAATGCAAAAACACCAATCGTTAAAAACACCCCTAACGCAAAAAGAAA CAATAGAAAGCGGTGAA	1604	IGDYLPKAKVYSSKNKNAQEAHEAIF PTSILPNALKDYLPKEELRYTLIYKR FLASQMDALFESQSVVACEKGEFK ASGRKLLFDGYKILGNDDKDKLLPNL KENDPIKLEKLESHAHVTEPPARYSE SLIKVLESIGGRPSTYAPTISLLQNRD IKVEKKQISALESFAFKVIEILEKHFEI SKFSASLEEEELDNIAQNKADYQQVLK FYYPFMDKIEAGKKNISQK/HEKTGQS CPKCGGELVKKNSRYGEFIACNNYPK CKYVKOTESANDEADQELCEKCGGEM VQKFSRNGAFACNNYPECKNTKSLK NTPNAKETIEGVKCEPCGGDIALKRSK KGSFYGCNNYPKCNFLSNHPINKRC EKCHYLMSEIRYRKKKAHECICKERV FLEEDNG	W
HP1493	1605	CACCTACGCTGTTGGCCAGCTTGCAAAATTTGCATTTTATTAGAGCTGGTGAAGAACGCCAGAACGCCATTTT AGAAAAGCGGTTTTGAGTTTTAAAAAGAAATTTTGGAGAAATACAACTCCGCTCTCATTTGAATGATGAATGCAA AAATACTAAAAGCGTTTTTACCATCAATAAAAGTTTTCTTAAATAAGGCTTAGTTTTTAATTTTATTGATAAAGCAA AACCTATCTTTGATAAATCTCAGGGTGGTGTTTTTAAACGCTATGGAA	1606	TYARLASLHNLHFYLELVKNARNAILEK RFLSFKKEFLEKYNRSRH	
HP1493	1607	AAGTCTTAAAAGAGATTTTATCAAGTTATCAAAAAGAGCTTTTAAATTAACCAAGAGTTAGAAAGAGATTTTAA GAATGATCCACAGAAATCAAAAAGCCATAAAGATCGCTCTAAATACCCCTGATATTGCTATTATCCAGGGCC TCCTGGAACGGGCAAAACCACTGTGATCAATGCCATTTGTGAGAGATTGTTGAAGATACCCTAAGGATAAAAATAT CAAGGGGCAAAATTTACTGTGCGCTCAAGGGCATGATCGGACTAACCAATGCGGTGAGCGCATCAAGTAGGGGGA TTGCCACCTTTTAAATTTGGTGCTAAAAAATGCTAAAGAAAGCAATAACAGCAAGATGAAAGATTGAATGAGCGA TTGAGAGAGTTTGCTGAACGCTCATAGAAAGCGTGAAGAAAACCTGCAAAAATTAGGGGATTATGAAAATATAGAA AAAATTTGGATTTAGAAAGCCCTTAGACGCTACTATAGTTCGCTATAGCCCAATTAAGCCAAATTAAGCAAGGCGCAGCAAAAACAAAGAA AAAAAATGAGAGCTTTTAAATCTTCTATCGGTGAAGAGCTAAGCCAAATTAAGCAAGGCGCAGCAAAAACAAAGAA ATGCCCGCAACCTATCTATTATCCATGCTTTACGCCCAACACAGAGGGTTTGAAGATGATGGAGTTAT	1608	VLKEILSSYQKRALKLTKRVKKIKFKN PTENQKKAIAKIALNTPDIAIICGPPGTGK TTVINAICERLFEYYPKDKNIKGGQILLCA QGHDAATNNARERIKVGGLTTFKFGAK KNAKEEQYKQDERLNERLFEFAETLIE SVRKKLQKLDYENIEKILDLLEALRRY YSSPISELEFLKEIEKNESFI	
HP1493	1609	AAAATGCGGATAATGTTTTTGGAAATTTGTGCGAAATTTCTAAAGAAATTAAGCGAACATAGCAGTCTCTAAAAACAATGA AAAATGATAAAATCATGCAACGCTAAAGACGGACAGAGTAAGATGATTTGCCAGAAAGTCTGCGTCCCAAAA GTGGTTATATTAACCTATGCCAAATGTGTGGGAAACCCAGCCCACTTACAGAAATTTTCTACCCCAA GCAGTTCTAGGTGATCCATCCAGAGACTCTAGAGCGTTAAGCATTAGAGAGGGGCAAGATTGCAAAGCTTTCTCT GATAATTATAAATCTGTGGAGTGGTAGCGCTAAAGATTGCAAAATGGCAATGCCGTGCCCTTTATTGAGTGTA GCGCTCGCGCAGCGGCTTTGACTTTTAAAGGGTAAAGATGTTTAAACAATAATGACTTTAAGGATTACAGAAAAT ACTGGGTTTTGTTTCGCAAAATGCGTTTAAAGGAATTTTAGCGCTAAAGACATACAACTTGCGTTGATTTCAATGA TTTAAACGCGCTCAAAAAGGCTTATTGAAATTTTAGCGCTATCAATAGTATTATTGTTTTAAATATAATGAGTATG AATTGGAATGCTTTTTTAAAACTCCATAGAGCGAGTGTTTTCAAGAGATAGTGACACTCATATTATTATAAGCTGAA T	1610	NADNVLEFVRNSKELSEHSSPKNNEK LIKIMQTLKDGQSKDDLPESLRPKSGYI NTYAKMWWWEKPAPTITRNFSTPSSSR CIHPRDSRALSIREGARLQSFDPDNYKF CGSGSAKRLQIGNAVPPLLSVALAQAV FDFLKG	PCT/EP
HP1493	1611	GCTTTGTAATAACATTAAACCTCTGAAGGTGGCAGCGCATGAGCGGGCTTTAAATGGGCTTGCTCTAAAGCAATTT TGCAATATATTGGCAATAATTAATAACCAAGAGTACGCCCTCATCTCTGAAGATATTAAAGAGGGGTGATCGCTG TTGTGAGCTTGAAATGAGCGAGCTTTGTTTGAAGGCGCAGACTAAATCCAACTCGGCAGTTCGTATCGCGCGGC GTTGGTTTCAAAATTAGTCTATGATAAAATCCATCAATTTTGAAGAAACCCCTAACGAAGCCCAAAATCATTGCCAAT AAAGCCCTACTAGTGCAAAAGCCAGAGAACCCAGTAAGAAAGCCAGAGAGCTTACAAAGGAAAAGATAATTTGAG TGTCGGCAGCTTTGCTGGAATAATAGCCGATTGCCAGAGTAAGACCCCTTAGAGAGTGAAATCTTTTTTAGTGGAGG GCGATAGTGGCGGGGAGCGCTAAACAAGGGCGGATAGGGTTTTTCCA	1612	FVNNIKTSEGGTHEAGFKMGLSKAILC YIGNNIKTESRPISEDIKEGLIAVSLK MSEPLFEGQTKSKLGSYSYARALVSKL YDKIHQFLEENPNEAKIANKALLAAKA REASKKARELTRKKDNLVGTLPGLK DCQSKDPLESEIFLVEGDSAGGSAKQ GRDRVF	EP01/1542

HP1493	1613	TCACCAAGCCGCGCAAAATAGGGATGGCTCGTTAAACAATTTCAAAAACATCGCGCTCAGGACAGCCTGGATTAT TTAGAAAGAAAACCAATAAGGGGTGCTCCCTTTATATGAGGATTTGAAAGAAAACAAAGCATCAAGACACTCTA GCCAACCAAAATATTAGAGTCATCGGCAACCCGCTTATTCAGCCGGCGCAAGAGCCAAACGATAACAACCA AAACCTCTCACACCCAAAGCTTGAATAATTAGTTTATGAAATACGGAATAATCCACATCTAGAAGTGTGGGAAA AACACACGAGACACGCTCATTCAAAGCATCCGCATGGCGAGCGATGTTGTTAAAGATAGGGGTGATAGGCTTT GTGGTGAACGGGGTTTATTGACTCTAAAGCGCGGATGGTTCAAGAAATGCGTGGCCAAAGAAATTTTCGCATCT TTATGATTGAATTTGAGAGGCAATCAGCGCACTTCTGGGAAGTGTCAAAAAGAGAGGAGGAAATCTTTGATA GCGGATCGAGGGCGAGGATGCGGATTTCTTTTGTGAAGATAAGAGCACTCTCTGATAATACGATTTTATTATG AAGTGAAGATTACTTGAAGAGAGGCAACCACTCACTGCTCGCCAAATTTGAAATTTGGATTTTGCGCTTTTG AGAAATCACCCGAATGATAAGCGGATTTGATCAACCAAGGAATGACGCTTTGAAAACTCATCCCTTTAAAA GAGACAAACACTCCAAACGACAGCGTTTGTGACATCAATCTCTTGGCGTGGTGAGCGGTGATCCTTTGGGTG TATAACTTTTCTCCAAACATTTTAACCCCAATCGGTGCAAAATGCATTGACACTTAAACGCTGATTGAAAGCGCTTCA ATGCGCGTTTGTAGGGAAGCTTTCAACAACGCGCTCAAGCGTCAAGCAGGCGATCTTTACAAACAACCTTAATGAT AAAGAAATCACCAACCGA	1614	TQAAQNRDGSLNFKNIALTDSLIDYLE EKTNGVLPYEDLKENKGIKDTLANQ NIRVIIGNPPYSAGAKSQNDNNQNLSH PKLEKLVYEKYGNSTSRVSGKTRDT LIQSIRMASDVWKDRGVIGFVWNGGFID SKSADGFRKCVAKFEFSLYVLNLRGN QRTSGEVSKKEGKIFDSSRATVAIF FVKDKSTPDNTIFYEVEDYLKREAKL NWLAFENLDFVPFEKITPNDKGDWIN QRNDAFEKLIPLKRDKTQNDSDVFDINS LGVVSGRDPWVYNFSPNLTQSVQKCI DTYNADLKRFNARFREAFKQRAQSVK AGDLYKQLNDKEITTDKTKIAWTDGLK
HP1493	1615	CTTTTTAGCTTGGCTTCCCTAAATCCTAGCCCTAGCATGAACACTAACATGCTCAATTCCTCTATCACTCAAA GTAATTTAAACGCTTGAAGATTTCAACACATATTTAGACACCAAAACGCCCTTTTAGCATGCGACACTAAAG GCGATGGGGGATGCTGAGCCTTTAGAAATCCTTTTAAAGCCGCTCAACGCTCTTAAAGACGCTTATTTTGAA AACAGAGAAGTCATAGTCATGGCGGCGAGTATAGAAAGATTGACAGCGTTGAAAGGATTAGCAATCTTCTAG CGGGATTCAAGCGAGCGCTTAGCTTTGGCGTTATTTTAAAGGAGCCAAAGTTACTTTGATCGCATCAAACTTCCC CACCCCTTGGCTAAAGAAATCACAAGCGTTTAGTTAGGACACCGCTTCTTATGAACGCGCTGAATAGTGCCG CTAACAACTTGCAAAACATGCTTAAACCCCTGCTCTTCAATTTAGCGCCATTAGCGGATTTAGTGCCTAAACTT CTTTAATTAAAGCTTAAAGAGGAGATAGGCAACCCCTAAACATTTGAATCGGTTCAAAATAAGGATTACTGGT TTCTATCAATCCTAATCAATTCGTTAAATCGGTTTAAAGCCGAGATAGGCAACCCCTAAACATTTGAATCGGTTCAAAATAAGGATTACTGGT AATCTTTTAAACCTTTTAAAGATAACGGCAAGGATTGCTCTGTTGCTGCTTGAATCTCAATTAAGATTACGCCCTT TTGGCTCATTAGAGAAATGAATTTGGCTCTTTAGCCATCATAAACCCCAAAATCCCTTCTATGAACAAATTAGAA CGAGCTTAAATCCTTGATTTTATCAAGACACGCGCTTTAATGCTAGAACCCCTAAACGCTTAAACCAAGCTTAA CGCTCTTCATTCCAAACGCTACGCACCATTTAACGCTGCCCTTACCCATTCTTTAAAGGTTTTAGAAAAACAAGAT AAAGATCTT	1616	FLACASPKILAPSMNTNMLNSPITQSNL KRLKDSNHILDTKNALLACDTKGGA MAEPLEILFKAQTLTKDAYFENREVIV MGASIEKIDSVRTISNLSGQIASALA LALYFKGAKVTLIASNFTPLPKEITSVL VSDTASYENALNSAANNLQKHALKPLL FNLAISDYVPKTSFNKYKLKKEIGETL NIECVQNKDLLVSINPNQFVKIGFKAED NQQNAIKNAQNLKPFKONGKDCSVV ALNLKDSRPFSGSLENELWLFHHKTQ KIPSMNKLASFKILDFIKDVAL
HP1493	1617	AAAACCTGATTTGAAGGAGTTGGAGGAATACCTACCATAAACAAGGTGCTTTATTTGGACAAAGAGGGGAAATTG CAGGATTTTAAAGCGTTCAAGAGCAAGTCAAGCATGATTTAAGCATGCAAAAGCGAATGAAAAGCCTTAAGGAG CTATATCGCTCTAAAGAAAGCGAAGCGCAAACTACCCACACAGATTTTGAAGAGAACAACTCCCTCTATCTGC TGAAATCAGCGCAAAACTCACCGCTCTCAACCCCTTGAATCTTAAAGCCAGAGCTTTTAAAGATGGTTTATTGT GGTGCAACTCATCTCAAAATTAAGACGAAATGCAAAATTTAATGAAGCTAAAGCGCTCTTAAACCCGCTAAC TCAAGAAAAACCTTATGGCGTTGCAAACTTAGCCAAAGAAAGCTTAAAGGATTTTAAAGGCAAAAGCGTGGGCT ATGTAAGCCCTAATTTTGGAGGCACTATTAGTGAGCTTAACCAAGAAAGTGCTAAGTTTATCAACGCTCTTT	1618	KPDLKELEYHYHKNKVSYLDKEGKLQD FKSVQEQVKHDLQSMQKANEKALRSYIA LKANAQNYTTQDFEENNSPYTAETQ KLTALKPLEILKPEPFKDGFIWQLISQIK DELQNFNEAKSALKTRLTQEKTLMALQ TLAKEKLKDFKGSVGYVSPNFGGTIS ELNQEESAKFINAL

HP1493	1619	TAAAGGCTCAAGAAGAGCTTATTGAACCAATCATCACTAAAGATCGATCAGTATCAATGCGATGATTTCACCTAATG AAGGCTTAAAGATAAGTGTTTCAAAAGAAACGATGCCTACTTAAACACCCCTTTAAACGCCCATCATTTCAAAAACAAG AGCGTCGTTTATAGCTGCTCTGATTCCATAACCCAGAGCTAAAGAACCAATGCGATGATAAACTAACGCTTATGAAA AGCAAAAGACCGACAAAAGACTAATTAATCTGTCGCAATTAGAACGCTTGAAAGAAATACGCGCAATATATAAAC CATACATTATCCCTTACTTACCAAAAGATGCGTTAAATGCGCCCATTTAGCCAAACAGGAAGACTATGCCAAA AAGAAAGTGCATGAAAATTTGACGACCCCTTATTCTAGCTCTAAAGAAATGAGCGTTCAATCGGCTATTTCTTTTGCAT TAAAAAAGTTGATGCTAAATTAGAAAAGCGGCTCTTATGAATGGCGTTTATATAAGCCCTTATAAAAAATCCACCCAT TGCCAAAGAACGCAATTTGGAAAATAAGAGCTTGAAGAAATCGCTTAAATATGAACCCCTAAATTAGAAAAGCAAAAGC CCTTTATTGATGCGGATAAAATGGCTATGCAATCTGCGGGTTATTGAGAAAGATAAAGGTGCTTGATTGCTTTT GCTACAGATAATTTGCATGGAGCGTAACGAACATAAAAAAGAGATTATCAGCCTTAAAGATAGTTGCACCCCAATCG CAAGCCAAATCTATAACAACAGGAGCGCTTGACAAATTCACAAGATTACCAAAAGACTTAAAAACTTGTCTTT TAGACACTTCTAACACTAAAGAAAGAGTGGAGCAAAATTTTCACAATGCCAAAAGAGCAATGAGAGATGATAACA AAGGCTTGGGTTTCACTTTAGAAAGAAATGGTTAAAAAATACGCTAAGTAAATTTAATTTTATGGATGGTTTAA AATCCA	1620	KAQEELIEPIITKKIDCYQCDDFTNEGLK DKCFKRNDAYLNTLLTPIQKQERRFSC SDFHNPKEQCMDKTNAYEKQKDRQ KRLNLVQLEAFEKEYAQYKPIIYFTK ECVKNAPHLANKERLCQKEVHEKFDD PYSSKELSVQSAISFOIKKVDAKLEKA ALMNGVYISPYKKSHTHCQRTHLENKSL KEIALNMNPKLEKQSPFIDADKMMAMQS AGLLRNKNKGVLIATAFIDICMERNEHKK EEFISLKDSCSTQSQAKIYNNKERFDKFI QDYQKDLKTCCLDTSNTKEEVEQNFS QCQKEQLRDDNKNKGLGFTLEELVKKYA K
HP1493	1621	GTTTGATAGAGCCTAGCAGGACTGATGGGAAATGCGCTTGATTTCCCAACGAGACATGGACAAAATCAAAAACGATT TTACGCTTACAAGGATATGGGGTTAATCTTGGGGCGTGGATATATCTTGGCTTTAAAGAAAAGCTTGATGA ATTAGACAACCTGAATAAGAGTTGCAAGACGCTCTGCACAACTCTAAAATACCAAAACCCCAACGAAAATTT AAACACCCCTACGAAATTTTACGAATTGATTTTAAATAATGAGCCTGACTTGGCTTTAAACCCCAAAAGCCTAG AAGATTTTTAGGCCAAGAGCATTAGTAGGGAAGACGCCCTTATTAAAGCCCTACAATCCAAACACTTCCCCC ATGCCCTTTTCTATGGCCCTCCTGCGTGGGTAAACAAAGCCTGGCTCAATCATCGCCTATATGCTAGAGCGCCCC ATTCTTTTATTCAATGCGACGGATTTTAAATTAGAGGATTTGCGCCTTAAGCTT	1622	LIEPSRTDGMRLYSQRDMDKIKTILRL TRDMGVNLAVGDIILRLKEKLDDELNLN KELQDALHSHKNTKTPTKNLNTPTNF YELILFKK
HP1493	1623	AGAAGATTTAAACCCCTTGGAAATGGCTAGATCTTATAAAGAATGCTTGAAGCTATCAAAATGACCCAAAGAAGCT GTCTAAATCGTTAAAAATCCGAGCCCATGGCTAATATCATGCGTTATTGACGCTCTCTTCTAAGGTTCAAAA CGCTCTTTTAGAAGAAAATCACTTCAGGGCATGCAAAAGTTTGGTGGTTAGATGGAGAAAACAAGAAATTGAT CTTAATTCATTATAGGGCAGAACTCAGCGTGGCCAGACAGAAATTAAGCGGTGATTTTAAATAAACGCAAA TTTTGACAAATAAAACATGTTTCAAGCAACCCCAACGCTCATCGCTGGAGATGAATTAGAGCGCTTGAATCAAAAG TTTGTGGGATCATTACAAGCTTAAAGCGGCTTTGAAAGGGAATAAATCGTTTACG	1624	EDNPLELARSYKELLESYQMTQEELS KIVKKSRAHVANIMRI.LTLSSKVQNALL EEKITSGHAKVLVGLIDGKQELILNSIIG QKLSVRQTEDLARDIKINANFDNKKHG FKQTQTLAGDELERI.NQSLWDHYKLLK AALKGNKIVL
HP1493	1625	GCTTGGAGCGCCAGAAATCATTGTGCGCAATGAAAAGGATGTTGCAAGAGCCGTGGATGTGCTTTTGTATAACG GCCGAGCACTAATCGGGTTAAGGGCTAACAAACGCCCTTTAAATCGCTCAGTGAATCATTAAAGGCAAGCAG GGCGGTTTACGGCAAAACCTTTTAGGTAAGCGCGTGGATTTTACGGCAGAGCGGTGATTGTGGTGGCCTAATCT CAAAATGGATGAATGCGGGTTGCTTAAACACATGGCGTTAGAACTCTTCAAAACCGCATTTTGTATCCAAAGCTTGAAGA GAGAGGCTATGCCACCGCTCAACACAGGCTAAACGCTAATGAGCAAAAAGCAATGAAGTATGGGAGTGTCTG CAAGAAATCAGAGAGGGGTATCCGGTGTCTACTCAACCGGCTCTACCTTGCACAAGCAATCCATTCAAGCGTTCCA TCCAAAGCTGATTGACGGCAAGCGATCCAAATTGCACCCGTTAGTGTTC	1626	LGAPFIVRNEKRMQLJEAVDVLFNDNGR STNAVKGANKRPLKSLSEIKGKQGRF RONLLGKRVDFSGR3VIVWGPNLKMD ECGLPKNMALELFKPHLLSKLEERG YA TTLKQAKRMIEQKSNVWECLEITEG YPVLLNRAPTLHKQSIQAFHPKLDGKA IQLHPLVCS

HP1493	1627	GGTGAGCATGAGCATTGATGCGATCAACCTCATCGCGGCAAGCCAAACCCCTATTACAGATCACCGTTGTAA GAAAAACGAGCCAAACCTTTAGTGTAAACATCATTAGAGACATCATTAACTCCCTCTGTCTATGTGAAAAAGAT TAAAGAAACCCCTTATCTGTATGTAGAGTGAGTGGTTTGACAAGAATGTTACCAATCGGTTTAGAAGCGCTTAA AGCTAACCCCTAAGGCTAAGGGGATCGTGTGGATTAAAGGGCAATCCTGGAGGCTATTAAACCAAGCGGTGGC TTGTCTAACCTCTTCAATAAGAGGGGTTTTAGTCTCAAAAAGGCAAAATAAAGAAATAAATAAATAAATAA GCTAACGGCAGAGCCCTTATACCAATTTGCCATTGCGGTGTTAGTCAATGCGGTTACGCGAGCGGAGCGAGA TCGTGCGAGGGGCACTGCAAGATCACAAACGGGCGGTGATTATCGGTGAAAAAACCTTTGGTAAGGGAAGCGTGCA GATGCTGCTCCTGTCAATAAAGACGACGCTTAAAGATTAATCAACCGCACGCTACTATTGCCGAGCGGCTACCA TTCAAGCTAAGGGGATCACGCTGATATTGTGATTTATCCGGTAAAGTCCAGAAATGATAAAACAAATTCAGCTTGA AAGAAAGCGGATCTAAACACCATTTAGAGCAAGAGCTTAAAGATTTGATGATAAAACCCCAATTCCTCAAGAGCGG GATAAGACAAAGAAAAAGAGGAAAAAGAGATTACTCTTAAATGATCAACGATGATATTCAAGCTAAAAACCGCT ATTGACAGCTTGAACACCTGGTCTATCGTTGATGAGAAATGGATGAAAAAGCGCCTAAGAAAGAAATAAAAACTCATG GGGTTTTATTGAAAAATCGTTAATGAGTTTTTTCGCTCATCCCAATCAAAATCCTTAAATCATCAGTTTGATTTAAG TTTTGGTAAGCTT	1628 LSMSIDDAINLMRGKPKTPIQITVVRKN EPKPLVFIIRDIILKPLSVYVVKIKETPYL YVRVSGFDKKNVTKSVLEGLKANPKAK GIVDLRGNPGGLNQAVGLSNLFIKE GVLVSQKGNKEENLEYKANGRAPYT NLPIAVLVNGGSASASEIVAGALQDHK RAVIIEKTFGKGSVQMLLPVNVKDEAIK ITTARYYLPSGRTIOAKGITPDIVYPGK VPENENKFSLEADLKHLEQELKKID DKTPNSKEADKDKKNEEEKEITPKMIN DDIQLKTAIDSLKTWSIVDEKMDKAPK KK
HP1493	1629	GGGAAGTGGCTCAAAATAAAACGAAGCGATTGTTAAGGAGATCATTGGGAGCGAGAAAGCCTCTAAACCTAAAC AGCGCCATTGAAGTTTCAACACGAAAGCTTCTGCTATGAAGAAGCAACGATTGGAAGCGGCGATCTTAAACAGGT GTGTGAGAAATCAAAAGCGCACTACCTTTGGGATCATCTCAGCCTTTAAACCTTTAAAGACGCTTTTACAGAGA TTTCAATCATATGAGCAAAAGTTACTGATAGGGGCAAGCTAAAGCGGTGCAATCAATCTAGCGCTGATAAACTGG CTCAGTTAAACCGCGTTACTCTACTGCGAAGACAAATCTGTTAAAGTGGATTGGGATAACCCATTTTAAATCAAGG ACTTCTTAAAGGCAATAATACCTTTATAGGAGTTTTGTTTTATTGGGAAGCATTTTATGGACAGATTTTAAAG AATAACGCTAAGCGAGCGTGAAGACTTTTATGTCTAGTAAGGAGTTTTGCTGCTAAATACCGATACACCCCAAGCA AATAACAGAAAGAGCGAAAGCTGCAATCGTATTAGAGAATAAGCGGATTTATAGGTTTTGTTCAAGCGCTTAA CTCTTTAAAGACAAACCGCAAGATCCTTTTACCAATGAAGAAACGAGCTTTTGGTGTCTGCTAATGAGCCCTAC TATCGTGTAAATTAAGGGATTATTATTGTTAGCGCAATCTTTAACCAACGAGCTGTTATTGTGAAAGC AAATGCCCTATAGAAATTGATCAACGCTTACCGGGTAAGGACTTTAAACAGACACAAAGACGCTTCCAGACAT	1630 EVAQNKTRFVKEIIGSEKASKTKNSAI EVSNTKASAMKNETIGSGDLKKVCEKI KSALPFGIISAFKPKDAFYRDFNHNEQ KLLIGAAGSGCIQSSADKLAQLKTRLLY WQDKSVKVDWDKPKILKOFFKGNLY RRFCFLGKHFMDFLKNNAKASVKD FMSSKEFVAKYRYTPKQNTERRAKKLO SYLENKRDFIGFVQALNSLKDNPQDPF LPNEETSFLVFANEPTIVFNLRDYLVL AQIFNQQAICYCESKCPIELINASPGKD FNKTQDSFPD
HP1493	1631	GGGAATTGAAAGAGTGAGAGCTTTTACCCTTAATGAAACGAATTTAGAAAGAGCGAAAGAGTTTTAGTTTTG TGGATAATGAAAAAGTGAATGCAATGAGCGTTTTAGCTTTGGAATCTAAGGATCTTATTGAGCGAGCATAACATTA AAACGATTAGCCAAATACGCCATGCCGTAAGCTATAAAACGCAATTTGGCCTATAGTATTAAACGCTAGGAGCTTGC AAATTTCTTGACTTTAAGAAAGCAGTAATAAAGCCTTAAAGAAATGCAAGATTTAGCCAAAGCCTTATTGACGCTT ACCTGGCGAGCATCAGTATTGTTGAAGATTGTTGAAGCATTAGTTTTAAACAATACCGCTTAATAGCTCATCTTT AATGTTTTAAAAACGCCCTTGTTTTGATTAGATGAGATTTAAGGGGTTTTGTTGTAGGATTTTCATCAGGCCCATAGT TGCCTTATGGGCGAGACCAACAT	1632 ELKEVESFLPLNETNLRAKEFLFVD NEKVNAMSVLALENLRILLSEHNKNDL AKYAMPESYKTHLAYSINARSLQNFELT LRSSNKALKEMQDLAKALFDALPGEH QYLFEDCLKH
HP0862	1633	CGGTGTTTTGGTGTGGGATCGCTTTTGTGGCTTCTAAGATTGGTATGGAGTTTCATGCTGAAAGAAGATAGG GGGAGTTTTGGTGGCTTAAGGCTAAACCGGCGTGAGCATAGATTACATGACACAAAGAGTAAGATCTTTCA AAAAGCGATTGAAAAACATGCTGAAGTGGAAATCACCACTTGCAAGTGGTTATGGCACACACAAACCCCTTTTA AGGCTAAGATTTTGTCAACTCAAGCTTTAAAGAGCGTAAAAAAGAGCATCAATTTGGGCAATTTGAGTTGATGA GCGTTTTAAGGAAAGATTGAGAAAGCTTGGCTGAAGCTAAAGTTTAGATACTATTAACTTTOTGAAGTTACTCTTAT AGGGGCGGTGGGATAGTTGCGCCCTTCCAAACCTTTGTGTTTTCCCATTTCAAGAAGCGGTGGATAAAAGCGTG GAGAAATTTGAAAAATTTCTATTAGAAAGCCCTGAATTAAGAGCAAGGTTGAAAGCTATCATACAAGCAGCGGAA TCGCAACCGCAATTGCAACTCAAAATCTTAAGACAAACGCTAACAAATACGCGGTGAGCGCTCAA	1634 WLVFVGSFLVASKIGMEFMLKEDRGR FLVWLKAKPGVSIDYMTQKSKIFQKAE KHAEEFTTLQVGYGTTQNPFKAKIFV QLKPLKERKKEHQQLGQFELMSVLKEL RSLPEAKGLDTINLSEVTUIGGGDSSP FQTFVFSHQEAVDKSVENLKKFLLES PELKGKVESYHTSTSESQPQLQKILR QNANKYGVSAQ
HP0862	1635	GATTGAAAAAGCGAAACCTTCTATGGCGAAGATAAGGAAAAATGAATGTTTTGATTGAAAAATCCAGCGCGCTAGA AAGGGAATTGAAACAAAGAAATGAACATTTAGAGAACGCTTTTAAAGAGCAAGAAATATTGAAAAACGCTATGCTTTT AGAAATGGAAAAACAAAGAAATCTTTTCACAATAAAAAATTTGAAATTTGAAATTTGAAATTTGAAATTTGAAATTT TTAAAAAGCGAAGTCTCTTCAAAAGATAGTCTCCATGCTAATAAGAAATCCATACCAACAGCCCTAAATATC CACAAAAACAACCAAGAGATCCACAAATCATAACGAACTTTCAAGCCAAAGGAAAGCGGCTACAGAAGATGAAG CGTCTGATTGTACAAATTTAGACAAAGGCTATTATTGGATAGAAACCGAGCTTGGCATGCGCTTTAA	1636 IEKAKTFYGEDKEKLNVLNIENSSALERE LKQKNEHLENALKEQEVYLNKNAWLLM EKQKEIFHNKKLELEKSYQALNLIKSE VASKDTSSMHKEIHKASEILSKHKTNQ EIPQITNFOANEKARYKNESVLIVQILD KGVYWIETELGAWBI

HP0862	1637	TGGGGCGTGGGAGCAGCAAGGCGCATTTAATGAAAGGCGTGCATGTTTAGAGGTGCTTACCCAAAGCT AAAAGCATCGCTTTTGATAAACCGGCACCTTGACTAAAGCGGTTTTAAAGTAACGGATATTGTCCGCAAAATGGG CATTCTAAGAAGAGTTTGCATTAGCTTCTGTTCCAGCTCTTATCCACGCCCTATCGCTTATCCATTCAA AAGCATGCGAAGAAATGTTAAAGGACGATAAGCACCAACATGACATTAATAATACGAAGAGTGAAGCGGATGGG GGTTAAAGCGCAATGCCATACGGATTTAATCATCGCAGGGAATGAAAAATGCTCGATCAATCCATATCGCGCACA GCCCTTCCAAAGAAACGGCACGATCGTGCATGTGCTTCAATCAACTTATGTGGCTATATCGTCAATTAGCGAT GAGATTAAGATGACGCCATAGAGTGCTTAAGGGATTTAAAGTGCAAGGATAGAAAAATTTTGCAATTTGAGCGG GGACAGAAAGAGCGGACTGAGAGCATCGCTCAACCCCTAGGCTGTGAATACCATCGGAGCTTGTGCTGAAGAA AAAACGAGCGTGTTTAAACCTTTAAGAACGCTATAAGCTCCGGGATTTTGTAGCGGATGGCATCAATGACGC TCCGACTCTAGCGAGTGCTGATGTGGGATTTGCGATGGGAAGGATCAGAAATGAGCAAGCAAGCGCAGACATT GTGATCACCAATGACTCTTTAAATTCGTTAGTGAAGTTTAGCGATCGCTAAAAAACTAAAGCAATTATTTGGCAAA ATATCTTGTTCGCTTAGGGATTAAAGCGGTTTTTATCGTGCTAGGGCTTATGGGGTAGCGGACTTGTGGGAAGCG GTCCTTGGCGATGTGG	1638	GGVGAASRKGILMKGVHLEVLTOAK SIAFDKGTGLTKGVFKVTDIVPQNGHSHK EEVLHYASCQSLLSTHP/ALSIQKACEE MLKDDKHQHDIKNYEEVSGMGVKAQC HTDLIAGNEKMLDQFHIAHSPSKENGT IVHAFNQTYVGYVISDZIKDDAIECLR DLKVQGIENFCILSGDRK/SATESIAQTL GCEYHASLLPEEKTSVFKTFKERYKAP AIFVGDGINDAPTLASADVIGIMGKGS ELSKQSADIVITNDSLNSLVKVLAIKKT KSIWQNILFALGIKAVFIVLGLMGVASL WEAVFGDV
HP0862	1639	CTTAGAATTAACCTGCTTGCCACCCAAAGCGTCTTGCCCTGCAAAAAATCATTCTTTACTCATAGACAAAGGGCTT AAAACAGCGCTTAAGCCTTAAGTTAGATAAAATAGAAAACCAAGGCATAGAAAAATTAATCTCATATCCAGCAAAA GCTCAAAACCCACGCTTATGCGTTACAAGAAAAATTTGGTGCGAAGTTTGGAAATTAGACGCTAAAGAAAGCGTTA AAAACCTTGACGAAAAAATCGCGCTTTTATAAAATGCGCTGTTTAACTGTTGAAGCTTCTTTTAAGCCTCTTTGC CCAAAT	1640	LELNLLATQSVLPKAKILLIDKEGLKQR LSLSLDKIENQIEKLLHIQKLLKTHAY ALQEKFGCEVLELDAKESVKNLHEKIA AFIKCAV
HP0402	1641	CTTGCGGACATGCGATGGCTCTTTTATAAAATAAAGAGTAGCGGTGCTTGGTGAGGCGATACCGCCGTAGAA GAGGCGATTTATTTGGCCAAACATCTGCAAAAAGCTATCTCATCCACAGAGAGATGTTTTAGTGCGCGCTAT CACTTTAGAGCATGCCAAAAACAACGATAAGATTGAGTTTTAAACCTTATGTGGGAAGAAATCAAGGGCGATG CTTCTGGAGTGCTCTTTAAGCATTAACCAACACAGCCACTAACGAAAAAGAGAAATGGTTGTCCGGGGTTTTTTA TTTTGTGGGTATGATGTGAATAACGCCGTGTGAACAAAGAGATAACTCCATGCTATGCAATGCGATGAATACG GCTCTATTGCTGGGATTTTCCATGAAACGAATGTTCAAGGCTTGTTCGGCAGGAGATATTCGCATTTTGGCC CTAAACAAGTGGTTGCGCTGCAAGCGATGCGCTACGGCAGCTTAAGCGTGATTTCTTATTAGAACACCATTA ATCAAGCTTATAACCCCTAGATTTTAGGGTTATGAGTTCTGCTTCAACATTCATCGG	1642	CATCDGFFYKNKEVAVI.GGGDTAVEE AIYLANICKKVYLHRRDGFRCAPITLH AKNNDKIEFLTPYVVEIKGDASGVSSL SKNTATNEKRELWPG=FIFVGYDVNN AVLKQEDNSMLCKCDEYGSIVWDFSM KTNVQGLFAAGDIRIFAP/KQVWCAASD GATAALSIVISYLEHH
HP0402	1643	CAAGGTGATGATTTATCGGTTTATGTGCAGATGCAAGTGATATTTGCTCTAAATAAAGCTTTTAAGGGGAT TTTATAATATCTTAATAGGGAGTTAGAGGTTTTATGAATTACGATAACTATTGGGATGAGGACAAACCAGAACTC AATATCACGCCCTTAGTGGATGTGCTGCTGTTTTGTTGGCTATCTTATGTAACGACACCCACTCTTACTTATAAAG AAGAAATGCTTTGCTTCTGCTCAAAACCTGCTAGAGCCACTCAAGATAAAATGATAGATCCGCGATGGATAAAG ACGCAAAATCTATATAGATAGTCAACCTATGAATACAACTTTTCCCA	1644	KVYDLSVYVQMVDILSSKK
HP0402	1645	CTTTAGGGTGGCTTTGATCTTTATGTTGAGGCTTACTCATTTGCCAGCTCTTTTAAAGAATTAATAAAATTTTA AGCGATGCAACTAAGCCCTTACAAAGCGCTCTGTTATACITTTAGCTATTTTATCCAGAGAAAAACAAGAAAG CTTTGATTTAAGCGATTTAGTCTTTTATCATGCTTTTATAGCTGCTGCTTTGGGCTGTGATGAGTGGAGAAAT TCTATCAGCTACAATGAAGCGAAGGATTTTATAGCAGCGCATGGTTGTTCAATCGCTCAAAAAGCACTGAA ATTTAGGCCCAAAACGATTTGGCTTTAAGATTGCTTTTGTGATCGCTCATCTCAATTAACATGTTT	1646	LGVALILCSGLLIALPALIKELKKI
HP0402	1647	TTTTGGTTGCTGTTTTAAGGCAACACATGAATCTTTTAAAGGGCATGCGATTTTTCGGTATTAGATAGCGATGAA GTCAAAACGCTGTGCAACAGCTCAAAATTTCAAACTTTAGAGCCAGTATTTCTCAATCAAAACGGCATGATGGAT TTGAGCATGCAAGATAGCGAATGCTATAAGCGTATGAGCTTTTATCAAAACCGCTCAAAAAGACAAATTTAGTGGAT TTTGACGATTTGCTTTTTTAAAGCCTTAAGATTTTACAAGATAATGAACCATCGCCAAAGAGACTAGCGAG	1648	FGLFLRQHMNLLKRA(DFSVLDSDEV KTLCKQLKISNFRASISQIKNGMMDLS MQDSECYKAYELYQNALKKDNLVDFD DLLFLSLKILQDNETIAKETSE

HP1255	1649	TCAATAGCCAAAGGGAATTTCTATTTAATCAATCGGAATAGTATAGCGTTGCGGATGTGGAAGAAGATTCAAGTGGG GTAATCATGTGCGCTTGGCGATATTGCAAAATTGAATCGGTTTGAAGAAGACACACACTTTTTCGAGCTTTAAAG ACAAACCCGGTGTGATTTAGAAATCCAAAGATTCCGAGCGAATGAAATGAAATCGTAGATAGGTTGATGAA GCTTTAAAGCGCATTCAGCCATTAGCCCTAATGAAATCAGACCCCTTTTAGACACACCGGCTATATCCGCAAC TCTATTGAAGACGTGAAATTTGATCTAGTTTAGGGCGAATTTAGCGGTTTAGTGGTGTTCGCTTCTTGGCTAAC GGCAGCATCACCCCTCGTTTCAGCGATCTCTATCCCTATTTCTATCATGCGGACTTTTGGCTCATCCCAATGGATGGG CTTTTCATTAAACATGCTCACCATGG	1650	NSQREFSILINANSYSVADVEKIQVGNH VRLGDIKIEIGLEEDNTFASFKDKPGVI LEIQKIAGANEIENVDVYVEALKRIQAI NYEIRPFLDTTGYIRTSIEDVKFDLVLGA ILAVLVFAFLRNGTITLVSAISIPISIMGT FALIOWMGFSLNMLTM
HP1255	1651	GAATTTTGGCGGGTTACCGTGGATAAAATGGAAGTGGTTGATCCAAAGAGCATCAATCACTATCATTTGATTT ACCTGGCACTTACCGCTCAATGACTTACCACTGAAGAAAGGTTACTAAGATTTTGAAGAAAGGGCAATACGA TCTCATTCTTAATGTGGTGATTCACCAATTTAGAGCGTAATTTAGCCTTAAGCGCGAGCTATTAGACACGAATAA AAATGCTACTCGCACTCAACATGTGGATGAGGACAAAGAGGCGATTAAATCAATACAGAAAGCTTTCTAA AGATTAGGGTGTGTGCGTGCCAAAGTCAAGATCCAAAGAGATCGCTTGAATACCGAGCTTTTATTAGACG AAATTGTCAGGCTTTATCTCAAAATACTACAAATATGAACATAAAGTCCGCTCTCAAGCTTTAAGGAGTCTTT AAATACAGCCAGCGCTCAAGAAATCGCTCAATAGTATGATGATGAAACCAACCAAGCGAGTTTGAACACA CTTAAAGATTGATAAGATTTAATGCACAGCGTTATGGATTTTATTTTATGGGTTTATGTTTATCATTTTCC TTGAGCTTTTAAAGGGGGGAGTGCAAAAGCGCTTGAACAGGGTTTAAATTTTAAAGCGATGGCATCAAGA AAATGTGGCTAATGAAGATTAGCGTCTTTGGTGGCGATGGCATTATTGGGGAGTGGAGCGCGGTTTCTTCT TGCCCTTAAATTGGTGTGATTTTGGGATTTCTTACTAGAGACGACAGGCTATAGTAGGGTAGCGTTTGT TAGATGGGATCTTGCATAAATTG	1652	NFAGVTVDKMEVGLIHKEHQITIDLP TYALNDFTTTEKVTKDFLEKGGQYDLIN VVDSTNLERNLALSQQLDNTNKKMLLA LNMWDEAQKEGKINTEKLSKELGVVC VPTSARSKEDRLNTELLDEIVRLYSQN TTNENIKVPSQSFKESLKYSSQAQRI AQLVISENQNASFEHTYKIDKILMHKR YGIFLGFMIIFSLFSLGGGVQKALET GFKFLSDGIKENVANEDLASLVGDGIG GVGATVSFLPLIVLYFGISLLETTGYM SRVAFLLDGILHKF
HP1255	1653	CGAATTGAATGAATTGATTTTCAATCGCGCAAGCTCTAAAGGGATTAAAGGATCTAGTGAAGTTTAAACCAGCT TAATGAGGGCGTGAATTTATTTGATGTATGCCCTAATAAGAAATCGATGGCGATGTGGGATCACTAGCGATGAAT TTTCCAAAGTTTAAATCCGCTTTAGAGGGCTTGTGTAGATGTGATCCCTACAGGGATTTCACGACCGCCAGTGA TGATCGGCCAAAGAGAGCGATTTTGCAAGCTCTATCACTAAATCAAAAGTTAGCCTTGACTTCAAAATATGGCGTTT TAGTGCCTATCACTTCTATCGCCAAATGAAGAGTGAAGGCTGTTCGTTGTTG	1654	ELNELSFQIAQALKGIKGSSEVLTLNE GVNYLYVTPNKESMADVGTSDFSKF LKSALEGLVVDVIPTGISRTPVMIRQES DFASSITKIKSLALTSKYGVLPITSIAKI EEVDGPRVSVV
HP1255	1655	GGCGGAGACCAAGAGCTTGGTGTCTTCTTAAAGACGCTAACACCAAGAAATCATCACTCAAGTGTATCAAA AACTAGAGAATTAACACCTTTTACCAGATGGCTGCTCAATATGTTTATGATCGCTCAGAAATTAACGCAAA AGCATTGGCCACCGTTTCTAAACCTCTATTGAAGCGGTGTTTAAATCATCATCACGCTCTTTTATTTTAGGGAAT TTGAGGGCGAGCGTGGGTGATTTACCTTTAAGCTTGTGCGGTGGGCTTA	1656	GETTEGLVLSLKDANTKEITQVYQKLE ELKPFPLNGVSVINVFYDRSEFTQKAIAT VSKTLIEAVVLIITLFLFLGNLRASVAVG VILPLSLSVAF
HP1255	1657	TGCCGTTTATAAAAGTCGGCGATAAAGTCTTTTCAGGGACATTCATAGCCACAGGTTTATTAATGAAAGCCA CGCAAAACAAACAAACAGCACCTTGTCTCAAAATATAGAAATGATTATACGCTCAAGTTCAAGGCGAGAGATT CTCGCTTAGCGGATAAGGTTTCAAGCGTGTGTGCAAGCGTATCGCTATTCTATTAGCGTTTGTGGTGG CTCATCATTCACCTAAGCCGATTTTGGTGAATTTTGAATCGCTTAGAAGTGTGTATCGGTTTATGATGATT CTTGCCCTTGGCTTTAGGATTGGCTACGCTATGAGCATTTAGTAGCAACCAAGAGGAGTCTTTTAGGGTTA TTTTTAAAGACGCTAAAGTTTAGAAAAGCAAGGCTAGTCAATACGATCGTTTGTATAAAACCGGACGCTCACT AACGGCAAGCTGTGTTAAAGCGTTCTATCTAAGATAGAATATTAGAGTTATTAGGCTCAGTCAATTGAA AAGAGTAGCGAACATGTCATCGCTAAAGGGATT	1658	PVYKKVGDVSGTFSNHTSFLMKAT QNNKNTLSQIEMIYNAQSSKAEISRL ADKVSSVFPVPSVIAISILAFVWLIAPKP DFWNNFGIALEVFVSVLVISPCALGL ATPMSILVANQKASSLGLFFKDAKSLE KARLVNTIVFDKTGTLTNGKPVVKS SKIELLELSALSIEKSSEHVIKGI

HP1255	1659	<p>TTGGTTTATGCGGCGGCTCTATGGCTACATGCTAGGGCAAAGCATGCGTTGATGCGGATCACATCGCTTGC ATAGATAACACCATAGAAAGCTACCCCAACAAAGGCAAAACGCTATGGTGGGTTTACTTTTCTATGGGCA TTCAAGCGTGGTATTTAATGACCATCATCAGCGCGTTGCGATCGCTGGCTAAGAACACACACCGCGATGCTAG AAGAAATAGGGGGTAGTGGGACTTTAGTTCTGGGCTTTTCTCATTATAGGCTATTGAATGCGATTATTC TCTTGGATTTATAAAATATTCAAAATCGCACTCTAATGAAGCCTAAGCCAGCAACAAATGAAGAGATCGAGC GGCTCTAACGAGTAGGGCTTGTCAACCGCTTTTAAACCTTGTAAATTTGTCTCCAAGTCGTGGCATATTT ATCCTATCGGTTTCTTTTGGGCTGGTTTATACCGCTAGTGAATCGCGCTTTTGGCCCTCTCTAGCAGCGCG ATTAAAGTGAGTATGGTGGCATGCTCTTTTACCCATTCTTTTCCGCTGGCATGAGTTGTTTGACACTTTAGAT GGGCGGTTTCATGCTCAAGCGTATGACTGGCGTTCAAAACCCCTTTAAGAAATCTATTACAATATCTCTATCAGC GCCTTAAGCGTGTATCGCGCTCTTTATTTGCGTTGATTGAGCTTTTCAAGTGGTAGCGAAGAACTCCATTAAAT TTGAAACCGCTTTTAAAGAGCCTTACAAAGCCTGGAATTTACAGACTTGGCTATTACTTGGTGGGCTTATTTGTAA TAGCGTTTCTAGGATCGTTCTTTTATGAAATCAAAATTT</p>	<p>1660</p> <p>SFYAAASMAYMLGAKHAFDADHIACID NTIRKLTQQGKNAYGVGYFYSMGHSS VVILMTIISAFIAWAKEHTPMLEEEIGV VGTLSVGLFLLIIGLLNAILLDLLKFKKS HSNESLSQQQNEEIERLLTSRGLLNRF FKPLFNFSKSWHYPIGFLGGLGFDTA SEIALALSSSAIKVSMVGMLSLPILFAA GMSLFDTLDGAFMLKAYDWAFTPLR KIYINISITALSVFIALFGLIELFQWSEK LHLKFENRLRALQSLSEFTDLGYLYVL FVIAFLGSFFLWKIF</p>
HP1255	1661	<p>CGGCTCAAACAACGACCGATGATTTAGAAATGATTAGCGGACCGGTGTGTAGGGCATTGAAAAATTACG CGCGCCATTTACCGGTAAAGCCCTAACGAAACGCCCTTTTGTGTTGATTATTAGGATTTTGGCGGAGT TTTAGTCATTGTGGATGAAGCCATGTGAGTTGCCACAGTTGGGGGATGTATGAGGGATATGACGAGAAA AGTGTTTAGTGGATATGTTTAGATTGCCTAGCGCTTAGACAACGCCCTTTAAATTTGATGAATTTATCCATA AAATGGCCAGTCTTTTGTGTCGCTACGCCCAATAGCTAGATTAGAGCTTTCCAAAAGAAATGTCGCTGAGC AAATCATTGCCCTACAGGCTTTTAGACCTAAATTTGAAGTGGAGACGCGATAAGCAAGTCCAGGATTTGTTT GATGAAATCAAGTTAGTGGTGGTAGAGGTGAAGGTGCTCATCACCGCTCACTAAAAAATGGCAGAAAT GTGCAATATTATGCTGAATGGGCTTGAAGCGGCTTACATGATGAAATGATGCGATTGAAGGAATCACA TCATCGGCTCTTAAAGCTTAAAGAATTTGACATTTAATAGGATCAATCTTTAAGAGAAGGCTGATTGCTG AAGTCTCTTAGTAGCATGATGCGGATAAAGAAAGGTTTAAAGAGTGAACAAGCCTCATTCAAACCATG GGCGAGCGCTAGAACGCTAATGGCAAGTTTATTATAGCTAAGAGATCACTCAAGCATGCAAAAAGCCTT TGAGATCACTAGTTACAGGCGGCAACAAGAGAGTTCAATAAATCCATAACATCACCCCAAAACCGTTACGC GCGCTTAGAAGAGGAATTGAAATTAAGAGACGATGAAATAGAAATCGCTAAAGCCTTAAAAAGGACAAAAATGCCTA AAAGTGAAGGGAAAAA</p>	<p>1662</p> <p>RLKQRTHEHLEMISSATGVCKGIENYAR HFTGKAPNETPFCFLJYLGIFEREFLVI VDESHVSLPQFGGMYAGDMSRKSVLV EYGFRLPSALDNRPLKFDEFHKNQCF LFVSATPNKLELELSKKNVAEQIIRPTG LLDPKFEVROSDKQVCIDLFEIKLVVA RGERVLITLTTKMAEELCKYYAEWGL KARYMHSEIDAERNHIIRSLRKEFDILI GINLLREGLDLPEVSLVAIMDADKEGFL RSETSLIQTMGRAARNANGKVLLYAKK ITQSMQKAFEITSYRRAKQEEFNKIHNI TPKTVTRALEEELKLRDDEIRIAKALKK DKMPKSEREKIIEKLDKMKRECTKNLD FEEAMRLRDEIAQLRTI</p>
HP1255	1663	<p>GGAAATCGTATCCATTATCGTGTGTTTGTATTTTCAAATTTCTACAGAGAGCTTGGTGCAACTTTCACAAACGAT CCTATACCTTTTATGGCTGTATTTTAAACCGGTGGAATAAGTCATGCAAGCAGTATTTAGCGAATGGGAG TTTCCTAATCTCAAAATGCTTAGACCTTTTAAAAACGCTCCCTTTTAAATCGCATGCGATGGGCTGTACCTCAT TACATGCGCTCAATCAAAACCCAGCGTTGTTATAGCGCATCTAGATGATTCGATTTGAAAGCTTTGTATA ACCTATACGCTAGTGAACAAACAGCAACGATTTGTCAAAGCCTTTTATGCTTTAAATAAAGGCTGTGATG ACTTTATTTTGGGTTGAATGGCAAGCAGAGATCACGCTTTAGCGAACACTTTTATTGTTGGAATATTTAA ATTTGCCAAAAATCCAAGCCATAAGCGACTATGGTCTTTTAGGGTGTAGAAACCCCTTTCACTTTGGCCAGTTT AAAGGGGAACAAATCTCGCTTTTAGCCTGGATCTTAAAGCCCAATTCATCTTAAACCTCAAAATACCCCTTAAAA AACTTGGCTTAAAAACGCTCTTTCTGCTCGCTCAATGAAGCTACAGATAGTTATTTAGCCTTAGCTACACCTA AATCGGTGGTGTATCAAAAATCTTATAAGCGGTTTGTAGGCAAGTTTGTCTGTATATTGTGTCAGT TAAGAAGCGTTGAGTTAGCAAGTAGAGAAAGATTGATTCAGTTTCGCTTGGTGGAGGTGTTAGTGTCAAGT TAATGTGCTATTGTGGCGGACACAAATAAGAGTTTCAATTTTCAACAAACCACTACAGAGCGAACAATCAAC CCACTACCCATATCGGCTAAATCCAAAGTAATTAACATAAAGGAATAACCAAGATCTAGCATGTCTCAAAAATACGC TTGA</p>	<p>1664</p> <p>NIVSIWVFCIFQISTESLVQLFTTILYFI GLYFNRWNKSKQ</p>
HP1255	1665	<p>GGCGGTGATGAAGAACACATAAAGATGCGATGAAATGACGGATTAGAGGCTCAAAAATTAGGCAGCGTGTGT TGCTGATGTGGAATGGGGGTAAATCTTGCTCAAGCGATCCCATTTTAGATGGCGAAATGCTTACAGATGCG AAAGTGGTATGACCAAAACACCGCGGTGGTAGCTTACGCTGGATGCGCAAGGGCTAAGATTTTGGGG ATTTCTCAGGTGCGAATGTGGCAACGCGATGGCGATTGTTTAGACAATAAGGTCTATTACGCCCGGTGATTAGG GAGCGTATCGGTGGGGGAGCGGCGAGATTAGCGGGAATTTAGCGTGGCTCAAGCGAGCGATTAGCGGATCGCT TTAAGGAGTGGG</p>	<p>1666</p> <p>AVDEEHNKDAMKMTDLAQKLGSVLL SDVEMGGKILLKAIPILDGEMLTDAKV YDQNNQPVVSTLDAQAKIFGDFSG ANVGKRMALVDNKNVYAPVIRERIGG GSGQISGNFSAQASDLAIALRSG</p>

HP0978	1667	CAGGACTTGGAGGAGGACTGGGACTGGAGCCACCCCTACTATCGTTAAATCGCAAAAGAGTGGGAGCGCTCA CGATTGCTATCGTTACCAAGCCTTTCAAATACGAAGGGAATCAAAAGAGGCTGAAGAGGGATTGAAAGAA TTGGAGCAGTCTAGCGATTCTATTTGGTTATCCCTAATGACAAATCCTTCTCACCATGAAAGAAACGCTAGCACC ACGGAGTGTATAGGGAAGTTGATGCTTGGTTAGGGCTGAGTGGCATTCTACTATCATCACTAAACCCGG TAATATCAATGTTGATTTGCCGATTAAAGAGCGCTCTGGTTTAAAGGCTTTGCGTTAATGGGTATTGGTGAAGC CACTGGCGAAGAAATCCGCTAAATTAGCGGTGCAAAATCGGATCCCAATCGCCTCTTCTTGATGACGCTTCTATTGAAG GGGCTAAGAGCATATTGCTCTTTTGGACACCACCTGATTATCCTATGATGGCTTATCTCAAGCGTGGGATTTTA TTCAAGATCAAGCCCATCAAGATGTTGACGTTAAGTTTGGCCAACACACGAGCGATAATATCCCTATTGATCATGTGC GCGTTACTATCATTTGCAACCGGTGCTGAAAGAAACAGCGGTGGAGCGAGTTTGAATCTATCGCTACGCCCTCTCA GCCTGTGGTGAACAAACGAGAAAGTGGTAATGGCAGATTTTAAAGATCCCTACTGAAGAAAGACTATCCATAC CCACAACCATGAGAAATCCAGCAAGACTGATTGCAGATCTTGTCTTCTCCCTATTTTACAGGGCTATAATAAGCG GTTTGTGGG	1668	GLGGGTGTGATPTIVKIAKEVGALTIAIV TKPFKYEQNQKRKRAEEGLKELEQSS DSILVIPNDKILLTMKKNASTTECYREV DDVLVRAVSGISTITKPGNINVDADLK SALGFKGFALMGIGEATGEESAKLAVQ NAIQSPLLDDASIEGAKSINFFEHHPDY PMMAYSQACDFIQDQAHQDQDVVKFG QHTSDNIPIDHVRVTIATGAERNSSGA SLESIATPSQPWWKQTRKVGNGEYKIP TEEELSPTTMRIQDD
HP0978	1669	GGGCGGTTCTCAACTCATTCAAGTGGGAGCGTTAGTCAAGTTTGTAGCGTTTCAAAAAGCACTCAAGCTAAAA TCGTTCAAGTGTGTTTAAACCCCATCGGGCGAAGAGGCTTATTTGGGAAGAAGATGAAAGGATTTTAAAA GCCATTCAAAAGAGCAACCAACGCTAGGCTTTGAATGCTTTTGGGCCACTGCCGCTGATAGTGCTTTTGCCCC CAATAAACGAAAAATAACCCCTTTTATGTGAGCATGAGCCATGATGTGGGGCTAGCCCCCTTTAAAGCGCTCTATTT TGATGAAGCATTAATGTGAGTTGAACG	1670	AVSQLIQVGALVKFLAFQKSTQAKIVQ VCGFNPHAGEEGLFGEEDERILKAIQK SNQTLGFECEFLGPLPADSAFAPNKRKI TPFYVSMSHDVGLAPLALYFDESINV SLN
HP0753	1671	AAAAGCGACTTGATGCCCTATGATTACTCTAAATTGGGTATAGAGACTATTGGCGAGGACATTAGAAGCAATATTAA AGCATTACAGAAAAATGCTCTGTGGTATGGACACCCCTAAAGAGTCTTTTGGACGCAATGATAAAAAACAGGAAAA TGCGATTAAACGCATAGAACGACGAAAAATGTGCGGTAAAGCGATGACTTCAACAAGGTATGAACGGAACATTAAAG TTAATAACCTTGTAAAGCTATCGGACAAAGGCAAAAAGTGAAGGACATTGATTGCTAAAGTCTTGTAAACACCA TAGACACCGATGCGGGTTATTGCTTCAATTCGCCGACAGATTTAGCGACACACTTGGCAAGATCAGCCCTAGACTA TCTAAAGCATAGTTACCGCCATAGAGCAAGGAGGCGTGAGACTGAATTTATGCTTGATTGACAAAAATCACCTA TAACTCACTCCACAATATCTTAAGTTTCAATTTTGATATTGATAACCCCTTAAAGCGACCAAGTGTGTTGAGAGATTAGTC ATTGAAGTCCCAAGAGAACACTTAAAAATGTGAAGTTGCCACAAATCAAAAATGATTGACTTCTCAATCTTTGATG GCGCTTACCACTTTAAAGTTAAACCATGCTCTTTATCAGCGCAACTAACACGAATGCCGGAACCAACCATGCGCTA GGCTATTAGCCCGATTGCAACGCTTGTGGCGTTAAACTATCTTGTAAACCCATTGAAACGGCGTTAATGAC GCCATTAA	1672	KATCMPYDYSKLGIEGTIGEDIRSNIKAL QKMSRGYGHKPEFFLDAMIKKQENAIK RIEARKCAVSDDFKQGMKRNKVNILV KAMRQGGKVSRTLIAKVLANTIDTDAG YCFISPTDLATQLGNISPRLSKSIVTAIE QAEGLNYALIDKITYNLSLHNLSFIFDI DNPLSDQVFERLVIEVPREALKNVKLP QIKNVLTSQIFDGAYHFKS
HP0753	1673	TGCATTTTGAACGCTTGACATGAGCGAATACAAGAGCCCATAGCGTGGCAAACTCATCGGGAGTCTAGCGGT TATGTGGGTTTGAACAAGGGGTTATTGTTGAATCGGATTAAAAACACCCGCAATGTTTGTCTGCTTTTAGATGA GATAGAAAAGCCCATCTAACGTGTATGATTGTTGTTGCAAGTGATGATAACGCCACTTGAGCGATAATTTAGG CAATCAGGCGAGTTTAAAGCATGTGATTTTGATTTGATGACTTCAATGTGGGAGTAAGGATAAGGATACGCTAGGGT TTTTTAGCGCTAAACACCAAGTATGATAAGCCGTTAAAGAGCTTTGACCCCTGAATTACGCTCCAGGATTGATG CGATCGTCCGTTTAAACGCGCTCAGTTTGGAGGATTTTGAACGCTTGTCTGTAGAAATTAGACAAATTTAAAGCCC TAGCGCTAGAGCAAGACATAACCTTAAATTCATAAAGAAAGTTGTGAATTCATCGCGCAAAAAGCTACCAACGA CTTTAGGAGCGGAGAAATTAAAAAATCATTATGAAATCAAACTAAATTAAGCGGATATACTGCTCTTGCAATC GTTTAAAAACCTTGTAAGATCGCTTGTCTGTAGAAAAAACCAATTGTTTAAAGAAATCAAGCGCGCGCAAAA GGTGAAGAAATGACTTTTGAATGCTTTATAGTAAATCCATAGGCGCACTATCAGCGGCTAATCTCAACTATA TAGGCTCGATCACCATAGATGAGGATTTAGCCAAGCTCGCAAGCTCAGAGAGGCTGAAAGTAGAAATCGTGGGA TGTCATAATGCGGAACGCTTACGACCTATGTGATTTAGGGAAAAAAGGGCGCAATTTGCGTCAATGCTGCAG CAGCCAGAAAGGTGGCCATAGGCGATGTAGTGATCATTTTAGCTTATCGGAGCATGAATGAAGATGAAATCAACGCA CACAAGCCGAGCATCG	1674	HFERFDMSEYKEAHSVAKLIGSPSGYV GFEQGGLLVNAIKKHPHCLLLDEIEKA HSNVYDLLQVMDNATLSDNLGNQAS FKHVILIMTSNVGSKDKDTLGFSSAKNT KYDKAVKELLTPELRSRIDAIVPFNALS LEDFERIVSVELDKLALALEQDITLKFH KEVVKFIAQKSYQTTLGAREIKIHHNEI KTKLSDILLQSFKKPKCKIACLEKNQLV LKEIKRAQKVKENDF

HP0753	1675	TGATTGTGATGGATATGGCAGATTCAGCGGCGCAGCAATTGGACAAGATCCGCTCGGATATGGTTCGGTGCAAAAT GGAATTGGTTACAACCAATTAATAATTTCTGTAAACCCAGTGAATGTTAAAGCGGCTGAATCTCAATCAGAGATGT GGATTTTGTCTGAAGAGAGCGGCACTTTCTAATAACAATATTTTGGCGAAGCGGAGTTTGTCTATGGCGCAAG CGAATCGCGTGCAACAATAATGTCTTAAGGCTTTTACAATAACAGCCCTTTAAATCAAGGGCGGTAGCCCTTTTAA TCAGTTATTTTATAAGTTAGATGATGATATTTATCAAAAAAAGTTCGCAAGCTCTTTTCAAAAAAGACCCCTCTTTTGT TCGCAAAACTCAAGCCATTAAAGAAACAAACAAATACGAAGTGTTTTAGGGAATGATAGTGCAGATTTCAACCTCT TAGATAAGAAACAAACACGCCCTTATTGAAAAAGCCCTCTAGATTCAGCTTAGAGTTATACAAAAATAGCGAAA ATTACATGCTTTATCCTTATTGTTATTTGGCTTGGTAATGGGTGTTTATCGCTTGCCTTAGTAATGAAAAT TTAAACGCTTGGTGTGCTAGCCTGAAATAGAGATTTTTCATTTGCTTGAATCTTTTGGATTTTCCACTGAGA TTTTAGAAAATCGTTTGATTTTATGCTGCAAGTTTTCGAATTACAACATGATCGCTTCATTATTGATATGGATAAA AAGTCTCGTTTATACGCAAGATGTATGACTT	1676	IVMDMADARTQLDKIRSDMGSVQME LVTINNISVTQVNVKAAESQIRDVDF EESANFSKYNILAQSGSFAMIAQANAV QQNVLRLLQ
HP0753	1677	CCGTGCAGCTTGCTTATGCGATTGGGTGATAGAGCCAGTGTCTATTATGTGAACACGCATACACGAGCAAGTAT TCAAGCGCTGAGTTGGAATAATGCGTGAATCGGTTTCAAACTCACGCCAAAAGGCATTATTGAAAGCTTGGATTTA TTAAGACCCATTATTGCTCAGCTTATGCGCTTATGGCATTTTGGCGCGAATTAGAGGAATTCACCTTGGGAAAAAAC AACAAAGCTGAGGAGATTAAAGCGTCTTTAAGCGTTAAAAAATATTTAAGGTAATATTTAAAAAATTTTGTATA ATCAACAATTACAGAGGATTAAATTGAACAAAGAACGCTGTCTATTATTAAACCGGATGCACCTTAAGAAAAAAGT GGTAGGCAAAATCATTGATCGTT	1678	VQLAYAIGVIEPVSIYVNTHTNSKYSSA ELEKCVKSVFKLTPKGIIESLDLLRPIYS LTSAYGHFGRELEEFTEWETNKAEIEIK AFFKR
HP0753	1679	GGATTGAAAGGGTGGGTAGGAATCTTAGAAGATTTGAAATGAATTTAAAAAGATCCCAATAATCCTAATTTAGACAC GCTAGTGGATCAAAAGCTCAGGCTCTGTGTGTTAATTTTATGAGCCAGAAAGCAATCGTGTAGTCCATGATTTTGC TGTTGAGTAGGGACTTTTTCAGGCAATGACCTATACATAACACATAATCTGGAGGGCTTAATCTTCAAAACAG CATTATCCATGAATATTGGAAAGAAATAAGAAAGATGCGATACATAAGATCTTAAACAGAAATGATGCGGTGTCTAT GAAAAAGCTGTACAGAACTTACAAAGAAATAATTGACAAATACAGAGAGGCTATTGATAGAAATGAAAGGCTTTAA AAGTTCTATGCTCAAAAAAGTAGTCTTAAACAAACCAATTTAAAAATAGCCTTAAATCAGTCTTTTAAAGGCTAT TTAAGTATAATGCAAGTTTATTCAATAATTAGGATACACAAATGCGCTTAAATCAGTCTTTTAAAGGCTAT TATGATAGGCAATCATGTGATCATGCGAACAACAAATAAAGCGCTTCCACTTAAAGAACCTTGCATCGATCGATTAGAT CCAAATTAGACGCGGACGACTAAACGCTTAAAGTGGCTTCCACTTAAAGAACCTTGCATCGATCGATTAGAT CGTTAGGGTTTTTAAACATCTTAAATCCTTAAACCTTCTTTTAAATATCAATTTGCTGCTTAAAGGCTTAAAGGCT TGATATCTTAAAGGAGTTTAAATGAAACGCTTTCAAAAGAAATTTTATGATCTAGGAATTTGTTTGTGAAAG TTGAAATTTTAAATCAAAAGACGATGAAATTCAGCCAGAACTTAAATCTGAATCTATGAGCAATTTAA GGTCTTTAGACTCCGCTTATTTTAAATCCAAATGCTTGTGCTTTAGGCACCTCGGATACCTCGCCCTAGAAAAATTAT AG	1680	DLKGWVGILEDLKMNLDKPNINPDLTL VDQSSGSVWFNFYEPESNRVVIDFAV EVGTFQAMTYTYKHNNSSGGLNNSNSII HEYLEKNKEDAIHKILNRMVAVVMKKA VTELTENIDKYREIDRMKGFKSSMP QKK
HP0753	1681	TATTGCAAAAATCAGCGGAGCAATGATTTTAAATCAAAAGCGAAAAAGCAACGCCCTTTAAAAAGAGAGGTTTAA AACAGCTTTAAGGATTTATCGCAATCTTTGAGGTCATTTGCGATAATTTGCAAGAAAATCTAAACATCGGAGCG GAAAAAACCTTGATTTAGGAACCTTTGAAGACTTTTCAAAAAATCAAGCCCTATTTTAAATAGAAATTTGGTTTT GGAGCGGGAGGCAATTTGATAGAAATTAGCCAAACACCCCACTAAACATGCTTAGGGATAGAGATTACACCCCC GTCTATCGCGCAAGCGTTAAAGCAAAATGAGTTATTGATTAAAAATCTGCACATCTTGCAAGGCGATGGCCGTTT GGTTTTAGAGAGCATGCCAAATCACAGGTGCGAGAAAATTTTGTGCAATTTCCCTGTGCCATGGAATGAGAAAAAC ACCGCCGGGTGCTAAGCGAAAAATTTTAAACGAAGCTTTAAGGGTTTTAAGCCTAGAGGGTTTTTGGAAATTACGC ACCGATGATA	1682	LQKIRRANDFLIKSEKATPLKREVLKQA LRIYSQSFEVISHNLQENSKHASKKTL DLGTFEDFIQKNQAPILIEIGFSSGRHLI ELAKNNPTKTCLGIEIHTPSIAQALKQIE LLDLKNLHILQGDGRLVLESMPNHRCE KIFVHFVPWNEKKHRRVLSIEKFLNEA LRVLKPRGFLELRD
HP0753	1683	AGAGGCTAATAAGCAAGACGCTTTATTGCAAGCTTTAAAGATGAAGCCAAACCATAAAAAGAGAAAAAGAGAG AAGTTAAACAAGAGAAATTAAGACATCAATCTGCAATTAAGCAAAATCAGAGACAGCCTGAAACTCATTTCAAA ACATGTTTTGGATGAGAAAAACCCCAATCTTATTAATATCCCTCAAGAAATTTGAGAAATTTACAAACTGGCCCAACA AAGTGGGATGAACCCAGCATTATGATGAATCATGCAATTTAGCCTGGAATGATGCTTTACGCTACGCGGAA ATTCCGTAACGATTAGCGTTATTTAGAGAGAGTGTGCGCAAAATGATCTGTGTGCCCTGAAGATTGAATTTAA GGCAAAACGCATCTTAATGCTTGTAGGGCCCAACAGGCGTGGGAAAAACGAGCACTTAGCTAAATAGCCGCGCG CTATTCTAGGATGTTAGCTAAAAAATAACAAGTGGG	1684	EANKQDALLQALKDEANHKEREKRE VKQEEIKDINLQLSKIRDSLKLIQNMIF WDEKNPNSINIPQFAEYKLAQSGM KPSHLDIEMQLSLEMLPLRMRENSVTI KRYFREVLKRMILCCPEDLNRQKRIL MLVGPTGVGKTTTLAKLAARYSRMLAK KYKV

[illegible]

HP0753	1693	ACGATTGACGGTGATGTTTACGCCCGAAAGGTTAGGCTTAGCGACTTACACCAGTTAAGGGCGCGCTT TCTCGTAACGGCTTGAAGGCTATTGTTTTATGCACGATCCAGAAAGAAACGAACGATTAGAAAAGTTTGCTGAT GAATTGGACGGCTTTAAATCGCTGAATGGATTAGAAATACAGAAAGCGGGGATTACTCCAGGGAGGGAGCA GAGCGGGAATAGTTTTGAATACATTGACTTAGCCAAAGATGAAACATTTATCGCTGAAGTGAACGGGATTTTTTAA GGCCGCTAGCGTTTACGGGGAAACATTTGAAAATTGAAAATTAAAGGCAGAAATGGGTAAATTAATCATTTAAAAAA GGATAGAGATGCAAAATAAGAAATTTGGTGAAGAAAGCGTTAATGAAGAAATGTAGAGGTTTTAATCGTTATTT TCCCGGTTGCTTGAATAGAAATGATAACAAGCTCACGCTGGATACAGGAAATTAAGCGTTACTAGGGGATT TTAGCGAGATAAAGAGAGGGCTATGGTTGGATTGTTGGTAAGAAATCGCTTAAACCAAGCTTTTAAAGA	1694	RLSVMVILAPERLGLATLHQLRGRVSR NGLKGYCFLCTIQEENERLEKFADELD GFKIAELDLRYRKSGDLLQGGEGSGNS FEYIDLAKDENIIAEVKRDFLKAASVSR GTFEN
HP0979	1695	TGCTCTATCAAAATCACAGAACAAAATTTCAACCACCTCATTTAGTGCAGAAAGCCAGTATATGCAGCGTTTAGTCA ATAACACTAAACGGATTTTTGATAAAGCGTTGATAGAGAAATGAAAAAGCGCTATAAGATAGTCAATACATTCA ATAAATGCAAGGGGAATCATGGAACATAAAGAAATCGTTATAGGGTTGATCTAGGCTCTAGAAAGATTGCGCGA TAGTGCTGAATTTAAAGAGGGATTTTGGCATCATTTGGCAGCGCCCATCAAGACTCCAAAGAAATCAATTCAAAA GCCATTAAAGAGGGCTATCAATAGCCTTGCTCAGCTTCCAAAGCCATTAAAGAAATGATTAAAGCGCTAAAAA AATGGCAGGTTTGAACGCTGATGAAGACAGAAATAACCCCATGCCCCATTTGGGGAATACCCCTAAACTAAGG CGATTGTTCTTTCTGGGGCTTATAGTGAAGCATTAGAGATGTTACCGGTGTAGCGAGCACCAAGATAATGTGG TAACCAATTGATGAATCAATCGCGCTATCAATAGTGCATGCGCTAAAGCAGGCTTAGATAACGACAAACATATTTGC ATGCTCTCCCTATCGCTTACCTTTAGACAAACAAAGAGTGAATGACCCCTTAGGGATGAGCGGACTCGCTTGAA GTCCTTATCCACATGCTATACAGAAACAAACATTGAAATTTAGAAAAATCATGATCCAAATCTGGGGTAGAGA TTGAAAACATCGTGATCAATCTTATGCAGCTCGATTGCCACCTTATCTAATGATGAAGGGAATTTGGCGTGCTT GCGTGGATATGGGGGAGAGACATGCAACCTTACGATTATAGCGGCAATTCATACGCTATAACAAATATTTGCC GTAGGCTCTACCATTTAACCCAGGATTTATCGCACATGCTCAACACCCCATTCCTTACGCTGAAGAAGTTAAGATC AAATACGGGGATCT	1696	LYQITEQNFNHFSFAEESQYMQRLVN NTKTDFFDKALIEELKKRYKIVKYIQ
HP0979	1697	CGATCCAGCTTATAAAGGGGCTAAGATTGTCGTCATCGGTGTTGAGGTGGGGGTCTAACATGATCAAAACACTTG GTTGAATATGGCGTGATCAAGATGTTACCCCTATTGCGACGAACACTGATGGCCAACTCTCAAAAACAAATCCCGC TCCGGTTAAATCCCTTTAGGCAAGAAATCCACTGGAGGTTTGGCGCTGGGGGATTCTGTATATTGGTAGAAAAG CCGCTGAAGAAAGCGCTAATGAAATTAAGAGCGGCTAAAGACGCTAAATAGTCAATATCTCTACAGGACTTGGGA GGAGGACTGGGACTGGAGCCACCCCTACTATCGTTAAATCGCAAAAGAGGCTGAAGAGGATTGAAAGAAATGGAGCAGTCT TTACCAAGCCTTCAATACGAAGGGAATCAAAAAGAAAGAGGCTGAGAGGATTGAAAGAAATGGAGCAGTCT AGCGATTCTATTTGGTTATCCCTAATGACAAATCCTTCTACCATGAAAAAAGCGTAGCACCGAGTGTAT AGGGAAGTTGATGATGCTTGGTTAGGCTGTGAGTGGCATTCTACTATCATCACTAAACCCGGTAATATCAATGTT GATTTTGGCGATTAAAGAGCGCTCTTGGTTTAAAGGCTTTGCGTTAATGGTATTGGTGAAGCCACTGGCGAAGA ATCCGCTAAATTAGCGGTGCAAAATGCGATCCCAATCGCCTCTTCTGATGACGCTTCTATTGAAGGGGCTAAGAGCA TTATTGCTTTTTGAGCACCCCTGATTATCCTATGATGGCTTATCTCAAGCGTGGGATTTTATCAAGATCAAGC CCATCAAGATGTTGACGTTAAGTTTGGCCAAACACAGCGGATAATATCCCTATTGATCATGTGCGGCTTACTATCAT TGCAACCGGTGCTGAAGAAAGACAGCGGTGGAGCGAGTTTGGAAATCTATCGCTACGCCCTCTCAGCCTGTGGTGAA CAAACGAGAAAGTGGGTAAT	1698	DPAYKAKIVWIGVGGGGSNMIKHLVE YGVHQDVTPATNTDGGQHLKNNPAPV KILLGESTGGLGAGGIPDIGRKAEEES ANEIKEAIKDAKLVIISTGLGGGTGTGAT PTIVKIAKEVGALTIAVTIKPFKYEGNQK RKRAEEGLKELEQSSDSILVIPNDKILLT MKKNASTTECYREVDD/LVRAVSGIST IITKPGNINVDADLKSAI.GFKGFALMGI GEATGEESAKLAVQNAIQSPILLDDASIE GAKSIIVFFEHHPDYPMAIYSAQCDFI QDQAHQDVQVKFGQHTSDNIPIDHVR VTIATGAERNSSGGASLE:SIATPSQPW KQTRKVGNGEYLKIPTEEELSPTTM

HP0979	1699	AGCGGTAGAGCCGGGGTTAGGGCTAGAAACCAATAAGCATGGGCGACTTTGAATAAGGGCGGTGTGGGGAT TTTGCATGGGAATAAACCTATCTTTACAAGATGATGAAGGCCAGATTGCAGAAAGCCATAGCATTAGCGCCGGG TTGATTATCCAGGAGTGGGCGCAGACACAGCTATTTAAAGAAAGTGGCGTGCCTTTATGAAAGCGCAAGCGA TGCTGAAGCGCTAGAGCCCTTCAAGTTGTGTGCCAAAGAGGCAATATCCAGCGCTAGAAAGCTCACACGCT TAGCGTATGCCCTTAAAGCTCGCTCAAAATGCGAAGAAAGCATCATCGTAGTAATTTAAGCGGCAGAGGGGAT AAGGATTTAAGCACCGTTTATAACGCTTTAAAGGAGGTTTAAATGAGGTATCAAAACATGTTTGAACCTTAAAAA ACACGAAAAATGGCGTTTATCCGTTTGAACCTTGGCGATCCTAATTATGAATTGAGTTTGAATCATTAAACC CTAATTATTAGGGGGTGAGCGCTTAGAAATTGGCTTCTGCTTTCTGATCCTGTGGCGGATGGCATTACCATACAA GCGAGCCATTTAAGGCGTTAAACACGCTAGCATGGCTAAATTTCCAGCTTTTAAAAAGATTAGAGATTACAAC CACAATATCCCATAGGGCTTTAGCGTATGCGAATTTAATTTTCTTATGGCGTTGATGGCTTTACGCTCAAGCTA AAGATGGGTATAGATAGCGTTTAAATAGCGGACATGCCCTAATAGAAAAAGAAATTAGTCATCAAAATCCGCTCAAA AACACCAATCAAGCAAATCTTATCGCCAGCCCCAATCGAGCAGTAAAGATTAGAACAAAGTCGCTACGCATTGG CAAGGCTATATCTAGCGTTTAGCCAGGAGTGGGTTACAGGGCGAGCCGTTATTTAGAGAAATGATTGAGTGCTAT TATTAACCTTAAAG	1700	GVPEAGLGLETNKHGATLNKGRVGILH GNKTYLLQDDEGQIAESHISAGLDYP GVGPEHSYLKESGRAVYESASDAEAL EAFKLLCQKEGIIPALESSEHALAYALKL AQKCEESIIVNLSGRGDKDLSTVYN ALKGGGLK
HP0614	1701	GTTTTGCTCTGCCCGAGTTTATGGCTAAAGTGGATGAATACATGAAAG	1702	VLLSPSFMAKVDEYMK
HP0739	1703	TTTTATGGCTGAACGCTAAGCTTATTGATTTCTGTTTTGCGCCTTTATCTTGCTCCCTTGATGATTGTTGAG CGCTTTTTATTGATTTAGGGTTTTAGCGCTCTTTAGCGTCTGGAATTTTTGATGAAGACATTGCAGATATTATC GTGGCTAAAGCAAAATAAGACTAAACCAATGTTATAGAGCTAGAAATGTTAGAAAGCTTTTAAAGCGCTATCAA ACAAAAGGTTTCAAACTATTTTTAGGGGTTTTGCCATAAAGCTATTCTATGAGCGAAGAAACAAACATTTTAGCCTTG TATGATGAGCATTTCTTGCTCATAAAGCAAAACGAAACCTTAGTGGCATCCTCCGTTTAGAAGGGTTAGCTACACCCAT TTAAGCACAGCAATTGCAAGATCTTTTACCAGCGCCAGATGGCTTGATCTTTAGAAAAAGTCGTGGCGCG CCTGTGGTTAAAAGCGGTAAAATTGATCACCAACAAACATCAATCTGATCTCAATACCTTGAAGCGGATTTGAAT CAATTTGAAAAACAAAGAAAGTGTATGAAATCAGTATTTTTAGTTTAGAAAGCACTCACTCTTGCAATGGCGTTTGG AGCATAAGAAAAATCTCTCATGCTATAGGAAATTTAAGGATATCTCTCTTATAAGCGCATTTTGTGCA AGAACTTTAAAAAGCTTAGAAATCCAGCTCAAAATTTATGCCCCAACTCTTAAGCTCCAAGAGGTTTGAATTT TATGCGGAATACATTAATGGTTGATCTCCCTTAAACCTTAGTAGGGGGTATTGAGCGATAGCTATATCGCT AGTTCTATCATTGAAAAAGATTATTTCAAGAAAGCTTAAATCAAAAAACCTACAACCGCTTGATTGGCATTA AAGCTTATGAGAGCGAAAGGATCATTCTATAGCGATCGGAGCGCTTTTATACCAAGAAACGCTTTAGATATTATCT TCT	1704	LWLNKSYLSVFAFPILLPWIDLLSAFL LYLGFLALFSVLEFFEDEDIADIVAKSIK TKTKCYRA
HP0739	1705	TCAAATACCTGCACAGCACCCCAACGCTTATTAGACATGCTCTATGAAACCCCTTAAACACCCCTTGATGGGAAAG CTTACTTTTACCAAGATTGAGTTTAAAAAATCCTAGATTTTAAAAACGATTTTAGAAAAAGATACGATTTATCAC AAATCTCAACATCTTTCATGTGGAGTACGATCTGCATAAGCCGTTAGTATCCATTGATGATTGAGGGTTAATTAT GATGATTGAGGGTTAATTATGACCGGCTTTTACAAAAACGCTTCGCCCTTTATTAGAACTCTCTCAAAACACCACTTTA AAATCTATCGCAAGCTTATCAAAAAATCCTTGCTTTGTTGCGCGGTGAGAAAGTTGTTAAAAAATGGGTTGT AAAATTGGGG	1706	KYLHTHPNAYLDMLYENPLNTLQKAY FYQDLSFKILDFFKLTILENDTIYHKFST SFMWEYOLHKPLVSDIDLRVNYDRLV NYDRLLQNASPLLELSQNTTFKIRKAY QKSLPLLRAVRKLVKKLGL

HP0739	1707	TCGCTTTGTTAGTGGTAATGGCAATGAAGAAAGATTTAAAGCTCCCTTTAGTCAAAAAGCAGGAGATAATA CTTATATCAACGCTAATGCGCTAAGGTAAGATAGATGAAAAGGTTATTTGGCAACGCTCTCAAAAACATATGATG AGACTCTTGTGGAAGCTTTATGAGAGATTTCAAGGAACGCTATAAGATAGAAAACATATATTTATTATGATGATAA TATTAATAAATTTTGAATTTGCTAAGATCAAGCATAAAATAAGCTTGTATTTAAAGAGCCTAAATCTATCTAAAGCGG TTGCTTTAGGATTTAGTCTTTGTTGAAATAAATTAAGAAAATGAGCGTTTGGGTTTGGAGAGGCAAAAAGCGATGATTCAAA CGTTAAAGAAACCATAAAGTAAGACCTTTAATGATTGGCTTGTAAAGAAATTTAAAGAGCCTTAGGATTAGAAAAGAA AGAGTTCTTATCTACAAGATCTTTATCAAAAAGCTTTAAAGAAATTTAAAGAGCCTTAGGATTAGAAAAGAA GGCTTTATCTGTATAAAGATGCTTGCCTAAGCTCTCTATGGAAGTGTAAAGACGGCGGTTTAAAGAAATTTTGGAG ATCATTAAAGATAAAACCATTTTAGGAGATAAAAGAAACCTTAGAGATTGAACGGCTTTTATTTATCCCTAAAGGGCGA GAAAGTTTGGCTTTGCCCTTGATCCTAAATGAAGAAAATCGCTATCAAGGTAAGTAAATCACCTCTAAAGATTTTCCCG TAGAAAATGACGAAGATAAACAACCTACGCTCATTGACATTGGCACCGAGTTTAACTATGTGTAGAGTTTAAAC CTGTCAATAATGATTAAAGCCCATTTGTCAT	1708	ALLVGNNGNEEKILKLP ¹ LLVKKQENNTYI NANGAKGKIDKEGYLANALKNYDETLV EAFMRDFKERYKIEKLYLLDDNIKFE FAKIKHISLYFKDAKFYPKSVAFGFSS LFENKLLKNERLRYNVSDLVWKENHKS KTFNDCCGLVLERQKSDDSKEFLJLQDS FIKKALKNFKRALGLEKEGFILYKECLP KLSMEVWKDGRFKNFEIKDKTILGDKE TLEIETPIIPKGRSFALPLILNEEKIAY QGKITSKDFPLENDEEYKLTLYDIGTE FNYVLEFKPVNNDLKPIV
HP0739	1709	TAAGATAGACAAAGATGTCGAGAACTGCCAAGATATCAGTGAATCGCTCTTAAGAACAAAAAGAAAAGAGTG GGGAATTTGTAGATGAAATGGTAATCCCATTTGATGACAAAAGAAAGCAGAAAACAGATGAAAACAGCCCTGTC AAACAGGCTTTATAGGCAAGAGTAGTCCCATTTGTTAGCGCAATACACCCCATTTGAAATCACCTGACTTCT AAAGTAGATGCCACTCTACAGGTATAGTGGGTTGAGCCAAAGATGTGGAACATGAACGGCACATGAT CTTATTAGACAAAGGCACCTAAGGTGTATGGGAATATCAAGCGTGAAGGTGGCACCCCATTTATGACACGCTTAA TGATAGCTTTACTAAAGCCATTACGCTGTGATGATAATACCTCTAGCAACGCTCAAGCAGCAGGCGATGTTG GGTGAAGCAGGGTAGTGGCTATGTGAATACATTTATGAAGCGCATAGGCTTTGCTGTGATAGCAAGCGTGGT TAATAGCTTCTTGCAAACTGGCCTATCATAGCTCTAGATAAATCATAGGCTTGCAAGGTTAGAAAGTGAAGGA CACCTGAATTTAATACGCTTGGTCAAGCTATCAATGGTAGCATGCAAGTTCAGCTCAGATGTCTAATCAAAATTC TAGGGCAACTGATGAATATCCC	1710	KIDKDVAEATAKNISEIALKNKKEKSEF VDENGNPIDDKKAEKQDETSVVKQA FIGKSDPTFVLAQYTPTEITLTSKVDATL TGIVSGVWAKDVWNNMNGTMILLDKGTK VYGNYSQVKGGTPIINTRLMIVFTKAITP DGVIIPLANAQAAGMLGEAGVDGYVNN HFMKRIGFAVIASVVNSFLQTAPIALDK LIGLGKGRSERTPEFNIALGQAINGSM QSSAQMSNQILGQLMNI
HP0739	1711	ATAAAACCCTAGTCGGTAATGGTTATCTGGAATAGAGGCCACAGCTCTGCCAAAAATTTTCGGATATCAAGAAA GAATTTGAATGAGAAATTTAAATAATCAATAAATAATGACTCAAAACAGCACAGAACCCATTTATGCTAAAG TTAATAAAAAAGAAAACAGGACAGTAGTACCCCTGAAGAACCCATTTATCTCAAGTTGCTAAAAAGGTAATGCAA AAATTGACCGACTCAATCAATAGCAAGTGGTTGGTGGTGGGCAAGCAGCGGCTTCCCTTTGAAAAAGGCA TGATAAGTTGATGATCTCAGTAAGGTAGGGCTTCAGCTAGCCCTGAACCCATTTACGCTACGATTGATGATCTCG GCGGACCTTTCCCTTTGAAAAGGCATGATAAGTTGATGATCTCAGTAAGGTAGGGCGATCAAGGAATCAAGAAATTG GCTCAGAAAATTGACAAATCTCAATCAAGCGGTATCAGAAAGCTAAAGCAGGTTTGGCAACCTAGAGCAACGATA GACAACTCAAGATTCTACAAAAGAAATGTTATGAATCTATGTTGAAAGTGCAAAAAAAGTGCCTGCTAGTTTG TCAGCGAAATTGACAAATTATGCTATTACAGCCACACGCTAATAGCAATATCCAAATGGAGCAATCAATGAA AAAGCGACCGGTATGCTAACGCAAAAAACCCCTGAGTGGCTTAAGCTCGTGAATGATAAGATAG	1712	KTLVGNGLSGIEATA ¹ AKNFSDIKKELN EKFKNFNNNNGLKINSTEPIYAKVNNK KTGQVASPEEPIYTOVAKKVNADRL NQIASGLGVGQAAAGFPLKRHDKVDD LSKVLSASPEPIYATIDDLGGPFPLKR HDKVDDLKSVGRSRNQELAQKIDNLN QAVSEAKAGFFGNLEQITDKLKDSTKK NVMNLVYESAKKVPASLSAKLDNYAIN SHTRINSIQNGAINEKATGMLTQKNP EWLKL VNDKI
HP0739	1713	AAGGAGCGCTAATGGCTATTTCTATCTTTGGCTGAAAGCGGCCCAAAAAATCGCCAAAAATCGCCAAATTTGGTAA TGAAATAGATTGTCATTGTTGAAATGTGCCAAACTCTAAGCCATAGCTTGCAAAAAACACCTTTATTTTAAATTC CTTTTAAAGAAATTTGATTTTACAGAGCTTGCAAGCCCGCTTAATTTGCTAAAGCCTACAAATTTAGAAATTTGTCA TGCCAAAGCTTTACACAAAAAAATGATTTTAGAAAACCTTTTACACCCCATTTTAAAGAGCCTAAAGCCCTTAAATTT GAAGTTGAAAAATCCATGCTTGTGTTACCGGCGTGAATGCGGGCGGGAACCATGCTCTTAAATCGCTTTTAA GCGCGGCTTTTAAAGCAAGCATCTCATTCTATGAAATCAACGCCCATCATTCCTATCCCTATTTTAAAGAAAT CCACGCCATTATTAATGACCCCAACAG	1714	RSANGYFYLLPESAKIAQIAQIGNEI DCCIVEMCQTL ¹ SHSLQKHLLFLKFLKE FDFLDSLQARLNFAKAYNLEFVMPST QKKMILENF ¹ SHPIKPKPLNLKFEKSM LAVTGVNAGGKTM ¹ LLKSLLSAAFLSKH LIPMKINAHHSIIPYFKEIHAIINDPON
HP0739	1715	ATAGCTCACTCATGGATTATTAGTGAGCGTAGAAGAGGGCGTACTGGGCGAGTTGCAATTTGGGTAGGCTATGGC TCTTATGGAGGGCTTATGCTTAATGGAGCGTGAGCGAAAGAAACCTTTTGGCACAGGGCAAGCATGAGCTTGTA TGCTAACATCGCTACAGGGGGGTAGATCTTATCCGGGATGCCAAAGGAGCGGGCGTATGTTGCCGGGAA TTTGAGCTTGACTAATCCAAGGATTTTGACAGCTGGTATAGCTCTACGATCAACCTTTATGCGGATTACAGGATAAG CTACCAATACATCCAACAGCGGGGCTTTGGGTTGAATGTGCGGCGCATGCTGGGTAAATAGAACCCCATGTGAGC TTAGGGTATAACTGAATGTTACCAAACTCTTGGTTTCAGCAGCCCTTTATACAAAGCGCTACTATTC	1716	SSLMDLLVSVEEGRTGQLQFGLGYGS YGGMLNGSVSERNI ¹ FGTGQSMSLYA NIATGGGRSYPGMPK ¹ GAGRMFAGNLS LTNPRIFDSWYSSTINLYADYRISYQYI QQGGGFGVNVGRMLGNRTHVSLGYN LNVTKLLGFSSPLYNRY

HP0739	1717	ATTAGGGGTTGTGCGTGCCCAACAAAGTGCAAGATCCAAAGAAGATCGCTTGAATACCGAGCTTTTATTAGACGAAA TTGTCAGGCTTTATTCTCAAATACTACAAATAATGAAACATAAAAGTCCCGTCTCAAAGCTTTAAGGAGCTTTTAA ATACAGCCAGAGCGCTCAAAGAATCGCTCAATAGTATGATGAGTGAACCAACCAACGCGAGTTTGAACACACTT ATAAGATTGATAAGATTTAATGCACAAGCGTTATGGGATTTTATTTTATAGGTTTATGTTTATCATTTTTCCTTG AGCTTTTAAATAGGGGGGAGTGCAAAAGCGCTTGAACAGGTTTAAATTTTAAGCGATGGCATCAAGAAA TGTTGCTAATGAGATTTAGCGCTTTTGGTGGCGATGGCATTATGGGGAGTGGAGCGACGGTTTCATCTTG CCITTAATTGTTGTTGTTTGGGATTTCTTACTAGACGACAGGCTATATGAGTAGGCTGCTGTTTGTGTTA GATGGGATCTGCATAAATTTGGCTTACATGGGAAGATTTTATCCCTTAAATCACCGGTTTGGCTGCTCAGTGCC GCTTACATGGCGACAAGAACCTTACAAACTATAACGAACGACTGATCACGCTTTTGTGATCGGTTTATGAGCTG CTCGCAAGGCTGCTTATTTATGTGCTGTTGTAGGCTGTTTCCCTTCTCAAGTGTGGTGTGCTGTTTGT CATTTATATTTGGGGCGGTTGTGGCTGTAGTGATGGCCAAATTAACAATTAAGCGTGTAAAGGACAAACCGA ATCTTTTATCATGGAATGCCCAATACCGCTTCCAGTTGGAGATGCTCTATTCAGTATCTACACCAATCGCTT TCTTACCTTAAAGGCTGGGACTTACATTTAGTGGAGCGATTTAATCTGGTTTATGCTCAATACCCCTAAAGC GATCGGGCCATG	1718	LGVCVPTARSKEDRLNTELLDEIVR LYSQNTTNNENIKVPSQSFKESLKYSQ SAQRIACLVISENQQAASFEHTYKIDKI LMHKRYGIFLGFMIIFSLSLIGGGV QKALETGFKFLSDGIKENVANEDLASL VGDGIIGVGATVSFLPLVLVYFGISLL ETTGYSRVAFLLDGILHKFGLHGKSF PLITGFGCSVPAYMATRTLQNYNERLIT LFVIGFMSCSARLPYVLFVGSFFPSS AGFVLCIYILGAVVALVMKLLKLVF KGQTESFIMEMPKYRFPSPWRMVFYSIY TKSLSYLKKAGTYILVGAILWFMSPQYP KSDAAMKAYKQESLLVNKDTTLSSEAK EEKLKLKTELKDKNLKNISIVGRGGAY LEKVFSPMDFDWRLSVSLVTGFMKE VVSTLGVLFSLGDQNEKSDAFRGLR KEVSPSGIAFIVFVMFYPCFAATITFG REAGGIKFVAYLFIPTTVVAYAFSLAFY ATQILY
HP0739	1719	AGAGTCGTTTTTAACACCTTGCAAGCAGAAATTAATGGAGCGCATTTATAGAAGTGTTCAGGACGCGCTTCTAT GGGTTAGAGGCTTTGAGTAGGGGGCTAAAGTGGGTGTTTTGAACAAACAAAGCGCTTATAAGACGCTTT TAGAAAATATTTCCCTTTTAAACCGCTTGAAGAAAGAAATGGAATTCAAACCTTTTAGATGACGCTTCAAGCT TTTGCCACGCTGTGTTTAAAAATGGCGTTTGAATATTATTTGGATCCTCTTTTGAACAAGTGGGTTTTTA GGATTTATGAAAGTGTTTCAAGCTTTAGAAAGGTTATTGAACGCTTTAATCCAAATAATCTTTAGTGGTTTTG AGCATGAAGCATGCATGAATGCCCTAAAGCTTTGTAACCTTAGCTATAATCAACAAACAAATAATTTGGAACAAACAC TTTAACTTATTTCAATAGGAATAGGCTGCGAGAAAGAAATACCGCGCAACACCCCAACAAAGCAAA GCCCTTTTATTTGTCATTTAGGAAGCGTGTAGTGTGCTTTTATGGTGGGTGATTATCATGTTACTTATGGG AATAAGGAAGATCTAAAGAAACGCTTCTAAACACCCCAAG	1720	ESFFNTLQAEINGAHFIEVFSGSASMG LEALSRGAKSAVFEQNKSAKYKTLENI SLFKNRLKKEMEIQTFDDAFKLLPTLC LKNGLVNIYLDPPFETSGFLGIYEKCF QALERLLKRFNPKNLLVFEHESMHM PKSLVTLAIKKQKFGKTTLTTFQ
HP0739	1721	ACGGCCCAACGCTAGAAATTAAGAAAGAAAGGAAAGCTAAAGAAATATTGATGAAAGGCTGCTTGAAGAAA TCCATAAGAAACGCAACCTTACATGCTCAAGGGGAATTCATGAAACAAATGAATCTCTCTGTTCCACGAA TGGCTAAACAAAGAGCGGTTTTTATAGCGTAATCCTTGGCGATATAGGGTACGCTCATCTTATGAGAAGT TTGAACCTTTAAGCAATATTCAAGCTTCTCTTGTGTTGCTTAAAGCGGATCAAAAGTATTTTGTAAACGG GATTAGCGCTTACGCTTTATGGGAGTATTAGGGGGCGGATGAAGGATTTAAAGCGATTTTGTAGCCTCTT ATCAACCGCAAGCTTGAACATTGATTGTTGATGATAAGCCTATTGACAAAGAAAGGTTTGGTTAGGGATAT TTGGAGGCTTGGAGTGGGTGGAATGGGATGATCAAAATTTAAAGAGGTTAAAGGGTATTACACAGCCTAACGCT TTTGGATTAGTGTAAATTTAGGGGTGAGCATGACGCTTAAACCTCAACAC	1722	RAQTLEFKEEKEAKKNIDEKSLLEEIHK KKRQLYMLKGELHEKNESLFFQRMMAK NKSFFFFIGVLDIGVSAHSYKEFFELS NIQASPLLYGLRSGYQKYFANGISALRF YGEYLGAMKGFKSDSLASYQTASLNI DLLMDKPIDKEKRFALGIFGCVGVGNW GMYQNLKEVKGYSQPNAFGLVLNLGV SMTLNLKH
HP0739	1723	CCAAATGGAGTGAGCGATACGAATATTAAATCTGCTCACTGAATTCATTAACCGCGGTTTATCCAAAATA ATGATAGTAGTGATCTACTAGTCTTACAAGCGCTTTTCAAGCCATTACGAGCGCTATTCTCAAGGGTTTCAAGCCT TACAAAACGATATTAGCCCTAATGCGATTAACTTCTCAAGAGATTACTTCAACACCAACCACTTCACTCAT CTCGCAACCTTACGGCAGCTTTTAGGGGATAAAACATTCTTATGGCGCAACAAAGCTCATTTGATCGGATGATTA CGCCAGAAATCAGGTTCAAAACGCGCAAAATCAAGCCAACTAACCTACGCTCTCAACCGCTTTAAGCCAGTATGCGG CCGCTAAAGCACCACATGGCATGAGCAATGGTTAGGGGTGGTTGGCTATAAATCTTCTTGGTAAAGCG AGAAATTAGGCCCTTAGGCATTATTTTCTTTGATTACGGCTTAGTGAATAGGCTAGCCATCAAGCGTGAA GCGAATATCTTGGCTTATGGGTAGGCAACGGATTTTATGGAACCTTATCAGGAGGACTTACAACTAAAGCGTTG AATTTGGGCTATTGCTGGGTCCAACTGGCGCGCAACCTGGCTAGCTCTTAAGGCAACAAATCATTGACAA CTGGGG	1724	NGVSDTNLNLINLLTEFIKTAGFIQNNDS SVSTSLTSAFQAITSQSFQALQNDI SPNAILTLQETSNNTTQSFQTLRL LGDKTFFMAQQKLIDAMINARNQVQNA QNQANNYGSQPVLSQYAAAKSTQH MSNGLGVGLGYKYFFGKARKLGRHY FFDYGFSEIGLANQSVKANIFAYGVG TDFLWNLFRRTYNTKALNFGLFAGVQL GGATWLSLRQQIDNW

HP0739	1725	AGGCATCAATAACAGGGATTACACACCTTAAAAACCGATATTAAACACACGCTCAAAATTACGCCCCCTGTTGCCTAA AGATGCGCTCATTATCAGTGAGTCCGGTATTATTGCGCATGCACAAATCAAGCCCTAGCCCTTATGTGAATGGCTT TTTAGTGGGTAGCTCTTTGATGAAGAAAGGATTGAAAAAGCGTGATTAAATTGATTTAGCGGAAATAAAGT GTGCGGCTTACAAAGGATTAAAGACGCTAAAGCCGTTTATAAAACCATTTTATTTATGGGGTTTATTTTGA ATCTTCGCCCGCATACATCAAGCCTAAAGAGCCCTAAATACAAAGCGGTAAAAAAGCTGATTTTGTGGCGG TGTTTGTGAAGATAGCATTAAAAAATCAAAAAATCGTTAAAAAATCTGATTAAAAAGCGGTGCAGCTTTATGGCTA TTCGCAAAAGAAATCGCT	1726	GINNRDLHTLKTIDINHTLKLRLPLPKDA LIISEGIYSHAQIKALAPYVNGFLVGSS LMKEKDLKACIKLILGENKV/CGLTRIK DAKAVYKNHFIYGGGLIFEKSSPRYKPK EALKITKAVKKLDVGVFVKDSIKIKIKI VKKLDLKAQVQLYGYSSQKEIA
HP0739	1727	TTCAAGGGTTTTGGCTCTCTCGCTGTTATAAATCCCTTCTTTATCCAAAAAGGCATCAACGCCCTTTATGTTAAG ATCTTTAAATTTGATTGAGTGAGTTGAGCCTTTAGAAATTTAGGAGTTTGAAGCCTCTTTTACGGGCTCTTTAA AAAAAGAACGCCCTTTGACAAATCCCTAATATTGCGATCGGCTTGGACGCTTTGATCACTGATGCGCTTTT TAGACACGATAGCGCTTACAGATTAAAGCATGCTTATAAGCGCATGAATTAGTGGCGAAATCAACCCCTTA AGCCCTTCTTTTCTATGCGAATTTTACCTTTCGCCCAAGATTACCACTACCAACGCCCTTGGCATTTAGAAA TTTTAGAGGCTCGTTATTTGCGGGAAATTTACTACCGGTCAATAAGCCCTCATTACACAAAAACAACAATCTGTTG TGGCAATGAAGGGTCACACTTGTGCAAAAGACATTCAAGGCAATAGGTTGATTTTGTAGCGGTGGGAGCGTTA AATGTGGGTAAATGCGTTTAAATTTGATAAGAAATATCCAACTAACGCTAAAGCCGTTTACGCAAAACCTACTCTT ACAACCCGCGCATCAAGTTAAAAAGGGGATAATTTAGGAAATTTGAAATGGCTCTACTATCGTTTATTCTATC AAACACCGCTTTTAAAGATTGAAAGAAAAAACGTGAAGTTTGGGAAAGTATAGGGAAATTTTATGCAAAAGATG AACGATTTAAAGCTGCTATTTTGGAAATTTTGGCGATTGGACGCTGCTTTTAGTGGCTCATTTTACCAAAAGATG AGATTGTAGAGTTAGCCATTATACAGCGGATAGCCTGGAGTTAGCTAAATCGCAAGCCAAAGCGATAAAACCTC ATCGTGTTTTGGGGGTGCTATTTATGGCGAGAGCGTGAAAGCCCTAGCCTTTGACAAACAAGTGATCATGCCCAA ACTCTCATG	1728	SRVFGSLAGYKFPFQIKGINALYVKIF KIDLSEFEPLENYRSLNALFIRSLKKEK PEDKSPNICAPCDALITECAFLDNDSA LQIKGMPYKAHELVEINPLSPSFFYAN FYLSPKDYHHYHAPCDLEILEARYFAG KLLPVNKPSSLHKNNLFGVNIERTVLA KDIQGNRLYFVAVGALNVGKMRFNFD KNIQTNAKARFTQTYSYNPPIKVKKGD NLGNFEMGSTVLFQNTAFKDLKEKNV KFGESIGEFHAN
HP1025	1729	TAAGCGGCGTTACTAACAGCGTGAATAAAAGATCAGCCAGCTCAAAGCCGACCTAAATAGATAAAAAAGCTC ATCAATAACGAATTTGTTGTAAGATCATCGGCATCATAAAGGTTAGCCAAAGCAGGATTTAATCGTTTAAACGAG AAAAACAAGAGATCACAACTTGCAAAACCAATACGACACCGCTCCCTCTCAAAGAGCCATAAATTTGTAAAGC ATTAAACAGGAGCAACATTAAAGACTCCTTTGAAACGATTATGGAATGCTATGATGAAGAGTTGAAGAAAAAGAT TTTAAAAACCTAAAAAT	1730	SGVTNSVNKKISQLKAEGTKLDKLLINN EFVCKIIGTHKGLAKQDLVLNEKNKED HNLQNYDTAPSQRAINFCISINTSKNI KDSFETIMECYDEELKKKSFKNLK
HP1025	1731	CCAACGAGACATGGACAAAATCAAACGATTTTACGCCCTTACAAGGGATATGGGGTTAATCTTGGCGGCGTGGATA TTATCTTGGCTTTAAAGAAAGCTTGATGAATTAGACAACCTGAATAAAGAGTTGCAAGACGCTCTGCACAAACACT CTAAAAATACCAAAACCCCAACGAAAAATTAACACCCCTACGAATTTTACGAATTTGATTTTATTAATAAATGAGC CTGACTTCGCTTTTAAACCCAAAA	1732	QRDMDKIKITLRLTRDMGVN'AGVDIIL RLKEKLDLDNLNKEQDALHHSKNT KPTTKNLNTPTNFYELILFKK
HP1025	1733	TTTCCAAAAGAAATGTCGCTGAGCAAAATCATTGCGCCTACAGGGCTTTTAGACCTAAATTTGAAGTGGGAGACAGC GATAAGCAAGTCCAGGATTTGTTGATGAATCAAGTTAGTGGCTAGAGGTGAAGGGTGTCTCATCACACGCT CACTAAAAAATGGCAGAGAATTTGTGCAATATTATGCTGAATGGGCTTGAAGCGCGTTACATGCATAGTGAAA TTGATCGGATTGAAGGAATCACATCATCCGCTCTTTAAGGCTTAAAGAAATTTGACATTTTAAATAGGGATCAATCTTTT AAGAGAAAGGCTGGATTGCTGAACTCTTTAGTAGCGATCATGGATG	1734	SKKNVAEQIRPTGLLDPKFVRDSDK QVQDLFDEIKLVVARGERVLTTLTKKM AEELCKYYAEWGLKARYMHSEIDAIER NHIIRSLRLKEFDILIGINLLREGLDLPEV SLVAIMD
HP1145	1735	CGCTAACGGCTTTAGCGAGTTGAACGATCCTTTAGATCAATTAGAACGCTTTAAAAACCAAGTGGCTGAAAAAGAAAA AGCGGATGAAGAGCCCAATACATGGATGAAGATTACGTGTGGGCCCTAGCCCATGGAATGCCCAACCGCAGG GCAAGCATAGGCATTGACCGATTAGTGTACTACTGAGCTAAAGCAATTAAGATGTGATTTTATTTCCAG CGATGCGCTCTGTTAAACGATTTTAAATGTGGAGAGTGAAGAAATAGCGGTATTTTGAACAAACGATAGTGA AATTTTGAAGCTTATCTTTGAAGATACAAAGCGCAAAATGAGCATTTAGAAATGATAGCGAGCGAGAAATACACTTT TGCAAGCGTTATGGAGGCTATGGGAGTGTTTTAAACGAATAAATACGCTGAAGGCTACCTAACAGCGCTATTATG GAGGCTGTGAAGTGGTGATAAAAATAGAAAGCCTAGCCATAGAAAGGGCTAAAAAGCTTTTAAATGCCAGTTCCGT AACGTGCAAGCGCATTCAGGCTCACAAGCCCAATAACGCTGTCTATCAGCCTCTTTTAAAGCCTTATGACAAGATTTA GGCATGGATTTAAGCTGTGGAGGGCATTTAACGCTAGCGCTAAAGTGAGTTTAAACCGGCAAGCATTTATCAGAGCTT TTCTTATGGCGTGAATTTGGATGGCTATATTGATTATGAAGAGGCGCTAAAAATCGCTCAAGCGTTAAG	1736	ANGFSELNDPLDQLERFKNQVAEKEK GDEEAQYMDDEDYVWALAHGMPPTAG QGIGIDRLVMLLTGAKSIDKDVILFPAMR PVKNDFNVESEE

HP1145	1737	TACAGGGCATTATGAAGCGCAAAAGATTACATCACCGGTAGCATTGAAAGCGGGGATCGCATTCTAGCGGTGGG GGCGGAGCCCTTAATTTAACGGGCTTCAAGGCATCTTTAACGAACGCGACTTTGTATAACCGCGCCGCTGGCAC GCAAAGCTCGTCTATGAATTTATCTTAACAGCGCGAACATTGAGGCTCAAACTCTATTTATAGACGATACCGC ACAAATGGCGGTAAACCTAATTCAGTTCAACGCTTGAATCTGATTTTCAACAGCTCTTTAGAGGCTATGTG GGGAAACGCAATCTGTTTTAAATTCATGCAAGATGCGATCAGTTTCAACAGCAGCAGAAATTAAGCTCTGGT TTGATCAATGCAAGCTAAAGCGGTGTTGTTGACAAATCCAAATTAAGCGTTTCAAGTGGGACAGCAGTATTAA GCCAATGCGATCAATCTTCTCAAAATGCTCTATTATGCGAGCAACCATTAACCTTAGAACCTCAAGGCGATTG AATGTGAACGACACCGCTCGCTCAACCTCAACCAAGCAGCAGTAAATGTTTCCAAATACGCCAGCATCAACGATT GCGAGCTTGATTGCGAGTAATGCTCTCACCTTAATTTAACGGGCGGTAAATTCATTCAGCGAATATTACTACG AGTTTGAATAATTCCTCTATCGTGTAAAGGGGCGGTCTCTTAGGAGGCGAGTTAAATTAAGCAATAACTCTCT TTAGATTTCCAGGCTCTAGCGCTATCACCTCTAACACGCGGTAAATTTCTATGATAACGCTTTTCTCAAAGCCCC ATCACCTTCCATCAAGCCCTTGACATTAAAGCGCCCTTAAGTTGGAGGCAACCTTTTAAACCTCAACACAGCAGC GTGCTGGATTAAACACAGCCAGCTTGTTTGGCGATCAAGGGAGTTTGAATATCGCTAACATTTGATTACTAAGC GATCTAAATGAT	1738	TGHYEAQKIYTGIESGNRISSGGGAS LNFNGLGILLTNATLYNRAAGTQSSS MNFISNSANQAQNSYFIDDTAQNGGN PNFSFALNLDNFSNSSFYVVKTS VFKFNAKNAISFTNSTNLSSGLYQMQA KSVLFDNSNLSVSVGTSSSIKANAINLSQ NASINASNHSTLELQGDNLVNDTSSLN LNQSTINVSNNATINDYASLIASNGSHL NFGAVNFNSANITTSNNSSIVFKGAV SLGGQFNLSSNSSLDFQSSAITSNTA FNFYDNASFQSPITFHQALDIKAPLSLG GNLLPNNSVLDLKNSQLVFGDQGS LNIANIDLSDLNDKNRVYNIQADMN SNWYERISFFGMHINDGIYDAKNQTS FTNPLNNAKITESFKDNQLSVTLQIP GIKNTLYNIGSEIFYQKVYNNANGVYS YSDDAQGVFYLTNSVKGYYNPNQSYQ ASGSNNTTKNNLTSESSISQTYNAQ GNPISALHIYKNGYNFNKALGQMALK LYPEIKKVLGNDSPSSNLNLSNALN QLTKLTPNDWKNNELIDNANNSVVQN FNNGTLVGATQIGQTDNNAVVFGL GYQTPCDYTDVQCKFRGTYLQLL EYLNKGVKITDATCPYVVKPQVISM SKEGYQVLFQDINHPEVKGVISYATNQ ALVNSLEELQEKKLQRKVALVSQTK QTPKLLQIASYLVERCCTEVRFNTICNAT SYNQKAALDLSKEVDIMIVGGKTSN TKQLLSIAKHCKDSYLVEDENELELA WFKDKKLCGITAGASTPDWNIENVKQKI STI
HP1145	1739	GAATACCTGAAATAAGGGGTCAAAATCACTGATCGGACTTGCCGCTATGTGATCAAGCCCCAACAAATTGTGGA ATCCATGAGCAAGAGGGTATCAAAATCGTACTTTTGGGATATTAAACCCCTGAAGTCAAGGCGGTGATAAGCT ATGCCACTAACCGGCTTAGTCGTCATTCGTTAGAGAAATGCAAGAAAGCTCCAACGAAAGTGGCTTAG TCTCCAAACCAACAAACCCCAAACTCTGCAATCGCTCTTATTTGGTGAAAGATGCACTGAAGTGGTA TTTTAACACGATTGTACGCCACTCTTCAACCAAAAGCCGCTTTGGATTGAGTAAGGAAGTGATATTATGAT AGTGTGGCGGTAGACTTCTTCAACACCAACAGCTCTTAAGCATCGCCAAACAGCATTGCAAGACAGCTACT TGGTAGAAGACGAAACGAAATTAGAAATAGCATGGTTAAGGATAAAATTTGTGGGATTACCGCTGGGGCTTCC ACGCCGACTGATTATAGAAATGTCAAGCAAAATCAGCAGATTAAACACATT GACAATCTAACCCCTATTCCCTGATGACAGATCAAAATAGAAATACGAACCCACTAAAGTTACCGGAGATGCTA GATTATTACGCCCTGTGGGAAAGCCAAAGGCTTTGATCGTCCGCCACCAAGGACTGGGAAACGGAGCTGA TGAAAGAACTGCCCAAGGCATCACTTCAACCACTGAAGTGAGCTGATTATCTTAGTGATGAGCGCCCT GAAGAAATTACGGATATGCAACGAGCGTTAAGGTTTGTAGCTCCAC	1740	DNLTPFPDEQIKLEYEPTKVTGRMLD LFSPVKGQRALIVAPRTGKTELMKE LAQGITSNHPEVELILLVDERPEEVD MQRSVKGQVFSS
HP1145	1741	TCCAGCGCGCTAGAAAGGGAATTGAAACAAAGAAATGAACATTTAGAGAACGCTTTAAAGAGCAAGAAATATTGAAA AACGCATGGCTTTAGAAATGGAACAAACAAAGAAATCTTCAACAATAAAATTTGAAATTTGAAATCTTACCAAC AAGCCCTAAATATCTTAAAGCGAAGTCGCTTCAAGAGATAGCTCCATGCATAGAAATCCATAAGCGAGCG AAATTTAAGCAACACAAACCAACCAAGAGATCCACAAATCATACGAATTTCAAGCCAAACGAAAGCGCGCT ACAAGAAATGAAGCGTGTGATTGTACAAATTTAGACAAAGGCTATTATTGATAGAAACCGAGCTTGGCATGCGT TTAAAGCGCATGGAGTTTGTGAAACAAATCCAAACCCCTAAACAAATTTCAACACCCCTAAACCAACCAT CCTAAACCTAAAGAGCGAGCTTGGCGCTTGAATTAAGGGGCAACGCGAGAGAGCCCTGGATTACTAGACG CTTTTAAAGGACGCGCTTTAGGGGCTTTGAAGAGTGTGATTGCCACGGCAAGGAGCGGATTATTAGAA AAGTTTGTGAAGAAATTTTAAACCAACCAACCCCAAGTGGTGA	1742	DNLTPFPDEQIKLEYEPTKVTGRMLD LFSPVKGQRALIVAPRTGKTELMKE LAQGITSNHPEVELILLVDERPEEVD MQRSVKGQVFSS
HP1145	1743	TCCAGCGCGCTAGAAAGGGAATTGAAACAAAGAAATGAACATTTAGAGAACGCTTTAAAGAGCAAGAAATATTGAAA AACGCATGGCTTTAGAAATGGAACAAACAAAGAAATCTTCAACAATAAAATTTGAAATTTGAAATCTTACCAAC AAGCCCTAAATATCTTAAAGCGAAGTCGCTTCAAGAGATAGCTCCATGCATAGAAATCCATAAGCGAGCG AAATTTAAGCAACACAAACCAACCAAGAGATCCACAAATCATACGAATTTCAAGCCAAACGAAAGCGCGCT ACAAGAAATGAAGCGTGTGATTGTACAAATTTAGACAAAGGCTATTATTGATAGAAACCGAGCTTGGCATGCGT TTAAAGCGCATGGAGTTTGTGAAACAAATCCAAACCCCTAAACAAATTTCAACACCCCTAAACCAACCAT CCTAAACCTAAAGAGCGAGCTTGGCGCTTGAATTAAGGGGCAACGCGAGAGAGCCCTGGATTACTAGACG CTTTTAAAGGACGCGCTTTAGGGGCTTTGAAGAGTGTGATTGCCACGGCAAGGAGCGGATTATTAGAA AAGTTTGTGAAGAAATTTTAAACCAACCAACCCCAAGTGGTGA	1744	SSALEREIKQKNEHLENALKEQEYLKN AWLLEMEKQKEIFHNKLEKESYQQA LNILKSEVASKDTSSMHKEIKASEILS KHKTNDQEIPIITNFQANEKARYKNESV LIVQILDKGYYWETELGMRLKAHGSLL KKIQKPPKNKFKPPKTTIPKPEASRL DLRGQRSEALDLDLAFNLNALLGGFE EVLICHGKSGILEKFKVKEFLKNHPKV

HP1145	1745	GCGCACCTCTGGGAAGTGTCAAAAAAGAGGGAGGAAATCTTTGATAGCGGATCGAGGGCGACGGTAGCGGATT ATCTTTTTGTGAAGATAAGAGCACTCCTGTATAATACGATTTTATTATGAAGTGAAGATTACTTGAAAAAGAGAAG CCAAACTCAACTGGCTCGCCAAATTTGAAATTTGGATTTTGTGCCCTTTGAGAAATCACCCCGAATGATAAAGCGG ATTGGATCAACCAAGGAATGACGCTTTTGAAAACTCATCCCTTTAAAAAGAGACAAAACACTCCAAAACGACAGCG TTTTGACATCAATCTCTGGCG	1746	RTSGEVSKKEGGKIFDSGSRATVAIFF VKDKSTPDNTIFYEVE:DYLKREAKLN WLANFENLDFVPFEKITPNDKGDWINQ RNDAFEKLIPLKRDKTLQNDSVFDINSL G
HP1145	1747	TGGGCGGATGAGATGGTGGTGGGTGGGAGAACATGAGCGCAGCACCCATTGTGCGTTGACATGCG AGATGGGAAAGAAATGGGAATGCGAACATGATAGATCCATGATACATGATGATGCGGATGCGTTCAATAATT ACCACATGGGATCACCGCTGATAATGCTGCTCAAGCATACCATAGCCGAGAGATCAAGATAATTTCCGCGCTC CAGTCGCAACTCAAAGCAAGAGCCGCCATTATGCAGGAAATCCAAAGAAATCACGCCATTGAAATAGCGAA TAAAAAGGCGTGGTGGTTTTAAAGAACGAAATACCTAGAGAACGACGCTAGAAATCCCTTGCAAAAGCTCAAAC CCGCTTTCAAAAAAGACGGATCGGTAAACGGCGGAAATTCATCAGGATCAATGATGCGCGAGTATTATCATTTTA TGCAGCACTAAAAAGCGCAACATTTGGGTTAAAGCCATGGCGACTATCAAGGGGTTTGGTTGGGTGGTTGCA GTCCGGATATAATGGGTATATGCCCTAGCATCGCGATTA	1748	GRDEMVCVCGVENMSAAPYLSFDMR DGKRMGNANMIDSMIHIDGLWDAFNYY HMGITADNVAQAYHISREDQDNFALQS QLKARAAINAGKFQEEITPIEIANKKGV VVFKEDEYPRETTLESILAKLKPFAFKD GSVTAGNSSGINDGASIIILCSTKKAQT LGLKAMATIKGFGGLGGCSPDIMGICPSI AI
HP1145	1749	AAAGTGATTTATTAGATCAAGCCCCCATAGGCAAAACCCAGGAACCCCTGCCACTTACACGGGAGTGATGGA TGAAATCAGGATTTTATTTGCCGAGCAAAAGAGCTAAATTTTAGGCTATAGTGCAGCGCTTTTAGCTTTAATGTT AAAGAGGGCGGTGCGAGAAATGCCAAGGCGATGGGACATTTAAATAGAAATGCACTTTTGCCTGATGTTAG TCCAATGCGATAGCTGAAGGCGCTAAATACAAACCCCAACTTAGAAATCAAGGTGAAAGGCAAAATCCATTGCC GATGTGTTGAACATGAGCGTGAAGAGGCTTATGAATTTTGTAAATCCCTAAATCGCCGTGAAGTTAAACAGG CTTATGGATGTGGCTTAGGCTATATCAGTTAGGCAAAACGCTACGACTTAAGTGGGGGAGGCTCAAGGA TCAAATTAGCTAAAGAAATGAGTAAAGAACACAGGCAAAACCCCTTATATTTAGATGAGCCTACTACCGGTTGC ATTTGAAGACGTGAATCATCTTTACAACTCTTGAAGTCTTGAAGGCTTAGGCAATCTATGCTAGTATTGAGCA TAATTTAGACATTTACAAACGCTGACTACATTAAGACATGGGCGCTGATGGGGGATAAGGGCGGAAAGT	1750	KVIYLDQAPIGKTPRSNPATYTGVMDEI RILFAEQKEAKILGYASRFSFNKGG RCEKCGQGDGIKIEMHFLPDVLVQCDS CKGAKYNPQTLKIKVKGKSIADVLNMS VEEAYEFFAKFPKIAVKLKTLMDEVGLG YITLQGNATTLSSGGEAQRIKLAKELSKK DTGKTLYLDEPTTGLHFEDVNHLLQVL HSLVALGNSMLVIEHNLDIKKNADYIIM GPDGDKGKK
HP1145	1751	GTTAGAAATCCAAAAATCAAGCCCTACTCTTTAAAAAGGGCTTTGTATCACCCCTTATGAATGAATTTAGAG CAAAAGCGAAGGCTAAACCTATTTAAAGAGCAGCTTTACGGTTAGTTTGGCTTTTAAATGGATTCTTACACACA CTTTCCCGCTTTAGCGAATTTGACTTTCCGGCTTTTGCAGCATCAAAAGCAAAACCCAAATTTATCTCCTATG CGCTCATCAAACTCCCTCTTTTATCTCCGTTTGTAGAGCTAGAAAAGGCTTTGTTGTTAGCTGAAGAAATCG TGGAAGCGCATTTAGAAGAATTTTATAGAGCATGAGATTTAGATTGCTAGGCTTTAGGTAACCTGCGATGCG GATATTGCTATCACTGAAGATGAAGCGCATGATTATGCAGATTTGATGAGTAAGATTTGAGGAACGCAATCAAGG CGAAATCGTGGCTTGCAACCCCAAAAGGAGTCAAGAGCTTTTAAACCCCTTTAGCGCTTTTAAAGGAGTTTCA AACCCACTTTACAAAAGCACAACTCACCGCATGATATCTATAAAGCGCATGCTCAATTTAGGGGATTT GTGGGAATTAGTCAATCAGCGATTTTAAAGCGCTCAATCGCCCAATTTACACCCCAATCCACCCTCATTTCAA TGAAACGATCTTTCAATCTATAGAAAACAGGATCTGTTGCTGTTTATCATCTTATGAAAGTTTGTAGCCTGTGATT GATTTAATAGCAAGCCGCTAGCGATCCAGCCACCTTTCTATCAAAATGACGCTTTATCGGTGGCA	1752	LEFQKIQALLFKKGLCITPYNELNEQK AKAKTYFKEQLYALVLPFKLDSSTFP PLANLTFALFARIKOKETQIISYALIKLPS FIFRVELEKGLFVLAEE:VEAHLEELFL EHEILDCAFRVTCDAJATEDEAHDY ADLMSKSLRKRNGEIVRLQTQKGSQ ELLKTLASLSRFQTHSYKKHKLTMHI YKSAIMNLGDLWELVNHSDFKALKSP NFTPKIHPHFENNDLFKSIEKQDILLFH PYESFEPVIDLIEQAASDPATLSIKMTLY RVG
HP0177	1753	GCAAAAAAGACGCTTGGGTTTCATCTATGAGATCAGCGAGTTTCATGAAAGCCTATACCGCATGCTAAAAACAA GACCGATACGCTATTTATTGAGGTATCTCCCTCTAGGTATGGCCAGCATTTAACGACTGCCCTTTATGTCAAA TACCTGATTTGACGCTTTGAAAAAGCTTTTGGTGTCTTATTATACCAACTGGATTGCAGGAGGCACGATCAGG CGCATCAAGCAAAACCATTAACATTAACAAACGTTAAAGCAATAAGAGCGTTGAACCATCAAGAGCTTATA TTGAATAGCATCGACTCTTAAGACCTTTGATCAATACCTCTATACTTATGGGATAGCTCTTCTGTTTATCATAGCA AATGGTGGCTGCTTACCCCTAGCTAATTTATTCATGGCAGATGAAGAGAACCCCATTTTATCGCTATGATG CCGAACCCCAAGTGGAGCATATTTGCCAACAACGCCCAAAAGAGCGAGTCAATGGAACGCGGATTTTGACAAAGA AAAAAGAGAAGAAATATATCGCGAATTTAACCTTTTAAAGCGTAAAGAACGCGCATGCTTTTAAACCGG GGATTTTATGAGAAAAAGAAAAATTTATGGAGGCAAAAGACACGAGCAAAAGTATTAGCTGTTATGACATCACTAAAGA ATTGTATAGCAATTATAGGAAGTGAATGAGAAGTCCCTCCAAAGAGCGGATACAAATCTTTGTATACACTATCACGCC TGTTTACACATAGAGGGCAAGAAGATGATTTGAAGATGATTTGATCT	1754	KKDACGFIYEISEFMKAYTALLKKQDRY VYLLRYLPSPRYWASILTALYVKYPDFD ALKKLLVSYYYQTWAGGTTRIKQTSIN IKNVKSNSKSVETIKELIILNSIDSYNTFDQ YLYNLWDSSSVYHSHKWRPVLALANY FMADEEKPHFIAMDAEIQVEHILPQTP KRGQWNADFDKEKREEWVNNIANLT LLKRKKNNAHALNGDFDEKRIYGGKDT SKVISCYDITKELYSNYFRKWNEKSLQE RYKSLYNTITPVLHIEGQIEDDFEDDFD

HP0177	1755	GTATGTGGATAACGATTACGTGTTTTATTCCACAACACGGACAATAAAGACCATGAGTTTTATTCAAAGTTTTAGGG CAAAAGACATTACAGATCAAAAAGCCTTTAAATCCTATCGCCATTAAAGCCGGCAAAAGATTAAAGCGGTAGTGATT TTAAGAAACCCCTAAAGAGTAACGCCACAGAAATACAGAACGCTAAAGACGCTCTAATCCCATACCATACAAGCT TATAGCGCGGACGATAAGAAATATTACGATAGAAAGGAATCGGTGTTTATTGCACCAAGTGAGGATTGAAGCCTAAA ACTAGCGTTCAATCACITTCATAAGGCAAGCCTTGTTTGATCAATCTTCCATAAAGGATCGGTGTTTAAATCTTCTAT GTTAAACACCCCGTCTAAATGATCCGCGCTCCAAGTGCTATTGCAAAATCATTTAGCCGCGCACATCGCTGGCA CGCCGGTGGTAGCTTATGGCTTGCGAACCCACTTCTTCATAGCACCTTTTATGATCGCACACGTTGTAATGTAGA GCGTTTTGCTTGTTTAAATGCCGGTCATGTAGCACCCGATGTTGTTTACCGGTGGTGTCTTTGGCTAGAG TGGCTGGATCCGGAAGCAAGTTTTTAAATAATGATCGGCACGATTTTACGCCTTGATGCTCTATTCTTTAATGC CTAGCATGCCGACATTTTCCAAGCATTTTCAAGGTTAAATAATTTGAGAGAAAGTCATAAAACCTCGCCCTCC TTCTTTGATCGCTTCAGTGTATTATACGCTTATGGCACAGGAGCGATTAAAGGCTTTGCCCTAACTACAGGCATTGG GATTTAGCCTCTATTATACCGCTATTGTTGGCACGCAAGGATTATCAAGCCCTTTTACCTAAACTCACTCAAAAC AAAAGCCTTTACTTTTGTTGGCGTGAATAAAGAGAGCTTAGGAGGTTTTATGGAATATTCAAACGAACTAGAACTCT TAAGCTTCATGCGTTATCCCAATTATGGGTGATCGTTTCAGCAATTTTAGCGCTTCTAGCGTTGGGCTTTTGTGTTTT CAAGGGTTTTCTTTAGGATTGATTTTGGGGGGGAGTTTGGTGCAAGTGCCTACACTCAAAACGCCCTCATTA AAGAAGTGGCGATCTGTTGAAAAGAGCTCGCTTCAAGGCGTGCAAGTGAGCGAATTTGGCTCTAAAGAGAA ATTTAATCAAAATCCCTTTGTAGAAACGGCTGAAATGAAGATCTGAACGCTATCGTGCCCAACATTTCTAAACCC AGCGCGATTTTGAATCCGTAAATTTGACACCGTGGCCCTAGAGTGGGAGCGAATTTGAAAGAGAAAGGCATTT TGTCGCTGATTTAGCATTAATAGCGATCATGGTTTATGTAGTTTCCGCTATGAATGGCGTTTGTCTTTAGCGAGCG TCATTGCGCTTGTCATGATGTGATTTTAGTGGCAAGCTCGGTGATTGTTTTAAGATTGATATGAATTTGGAAGTGA TTGCGGCCCTTGCTCACCTTGATTGGGTATTCATTAAATGATACGATCATTATTTTGACAGGATCAGAGAAGAGATGC TCTCTCAAAAACCAAAACGCCACTCAAGCCATTGATGAAGCCATTCTAGCACGCTCACGCCGCTTTTAACTT CTTTAACCGTGTTTTTGTTGTTGATTTTGCGGTGTTGGAGTAAGATCATCATTTGGCTTTTCATTGCCCATGTT AATAGGCACGA	1756	YVDNDYVFLFHNTONKDFEYFKVLG QKDIQIKPLNPJAIKAGQKIKAVVILRKP LKSNATEYKNAKDALIPITIQAYSADDK NITIERESVFIAPSED	1758	SLIASVLLYAYGTGAIKGFALTGIGILA SIITAIVGTQGIYQALLPKLTQTKSLYFW FGVKNRA
HP0291	1759	AGAATAAGCCCAAAATCCTTTTATTAGAACTTCTAAATCAATAAACTTACCCCATAGAGCGTTTTAAAGAATTA GGCTTAATTTAGAAAATTTCAAATTTGCTTGTATGGCATGCTGATGAATATAAAGCCACTACGCTTTATCACGCTT TAAACACCAACCGGATGTTATTGCTCCCCAACTCACITTAACGAGGTTAAGCGGTGCTCTTTAAATGGATT TGATTATTGGGGCGGATACGGCATCACGCTTATGATGCGGTGCAAAACCCAGCATCACCTTTTATGGCAAC ACGCCCATGGAGCGTTTTAAATTAGAAAGCCCGATCAATGTTTCGCTCACCGGTAATCAACGCCCACTACCATAAA AAGGATTTTCTATCCAAAATATAGAGCCTAAATAATTAAGAAATGCGTTTTAAACATCTTAAAGGAAAAAGATGAC TTACAAAGAACGACTATACACGAAAAAATATTGAACAGACGACGCAAGGTTTTAAACAGAACTGCGCATTTTGAG TATTTATCGTGGATCTTATGTAATTTTGGGGTTTATTAGCTAA	1760	NKPKILFILETSKINKTYPIERFKELALILE NFQICLLWHADEYKATTLYHALKHQRD VLLPKLTNEVKALLFKMDLIIGDGTGI THLAWALQPSITLYGNTPMERFKLES PINVSLTGNNSNANYHKKDFSIQNIPEKK IKECVLNILKEKE		
HP0291	1761	ATGCGTTGGATAATGAATTAAGCGATCTTTAGACAAACGCTTAGAAATCGCTTAAAAATCGCACTCATCAACAAG AAAGCCCATTTATTGCCCTAAAGAGAGCAAGAAATTTTAAACGACTCAGCCAAAGGGATTTCAGCATTTGAATG GAGAAATCTTACGGGTTTTTATACAGAGGTTTTTAAAGATTTCTAGAAATTTCAAGAAACGCCCTGAAAGAGTTAAA AAATAAAGAGAGTTGTTATGTTTGAATAATTTACCTAGCGCATAGGACTTGTTTTCAAGGTTTTTAAAGCGCTCAA AAATCGTTTTATCAGATGTGAGTTTACGAATGCTTTTTATGGCAGCAGCGCTCATCAAGTGGCGGTGATT AGGATTGTTGGTATTCAAAACCACTTATGAAATCAAAAACCTTTTATTTCTATCTATCGGTAAAGATGCGTTTG AATGCGTAAAGAGCTTTTGAATTAGAAAAAATTTAAGATTCCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT AGACAAATTTGTAGGGGTGTTGATTCTACTTAAACCGGAGACGAGGATTAAGTTTATCTATTGAAGAAATTTGAT CGCTTTAAAGGGGAAAAATACCATAAGAAAAAAACCACTAAACCAAGTTTTTAAACCAATCATGCGAATTTTGTGTTAT GAAAAAATTTCTCCTCAAAATAAAGGAAGTTTTAGAGCTTCTCAAGCGTGGTTTTTAGAAAGCCAAACCGATGAT ATAGGGCTAATCAATGAAAAATAAGGGCATTCAAAGCGTTGTAAGAAATATGAAGCTTGGATGTAAGGGGGGCT TATTAGGGTTAATGGGAAATAGCCTCGTTTAGTTTGGAGAAAGTTTTTAAACGAAGAGAGCGCGCTCATCCACATTG AAAAGCCCGCACAGATATTGCAGCGCGGTATCAGATCATCAACCGCAG	1762	ALDNELSDLLDKRLEIALKIALIKQESPIY CPKREQEILKRLSQDFKHLNGEILTGF YTEVFKISRKFQENALKELKK		

HP0291	1763	AGGGATTAAAAAGGTTCAAAGACAGCAAAAAGACGCTTGGGGTTCATCTATGAGATCAGCGAGTTCATGAAA GCCTATACCGCATTCGTAATAAACAAGACCGATACGCTATTATTAGGATCTCCCTCTAGGTATTGGCCAGC ATTTAACGACTGCCCTTATGTCAAATACCTGATTTGACGCTTTGAAAAGCTTTGGTGCTTATTATTACCAA CTTGGATTGCAGGAGCAGCATCAGCGCATCAAGCAACCCAGTATCAACATTATCAAAAACGTTAAAAGCAATAAG AGCGTTGAAACCATCAAGAGCTTATATTGAATAGCATCGACTCTTATAACACCTTTGATCAATACCTCTATAACTTAT GGGATAGCTCTCTGTTTATCATAGCAAAATGGGTGCTGCTTAGCCCTAGCTAATTATTTCATGGCAGATGAAG AGAAACCCCATTTATCGCTATGGATCCGAAACCCAAAGTGGAGCATATTTGCCACAAACGCCCAAAAGAGGCAGT CAATGGAACCGCGGATTTGACAAAGAAAAGAGAAATGGTAATAATATCGGAATTTAACCTTTTAAAGCGT AAAAGAACCGCGCATGCTTTAAACGGGATTTTGATGAAAAGAAAATTTATGGAGGCAAGACACGAGCAAAAGT GATTAGCTGTTATGACATCACTAAAGAAATTGATAGCAATTATAGGAAGTGAAGTCCCTCCAAGAGCGGATA CAAATCTTTGTATAACACTATACGCTGTTTACACATAGAGGGCAAGATGATTTTGAAGATGA	1764	GLKKVFKDSKDKACGFIYEISEFMKAYT ALLKKQDRYVYLLRYLPSRYWASILT LYKYPDFDALKLLVSYYYQTWAGG TITRIKQTSINIKNVKS'NKSVEIKELIN SIDSYNFTDQYLYNLW'DSSSVYHSKW VRPVLALANYFMADEIEKPHFIAMDAET QVEHILPQTPKRGSQ'WNADFDEKEKRE EWWNNIANLTLLKRKKNAHALNGDFDE KRKIYGGKDTSKVISCYDITKELYSNYR KWNEKSLQERYKSLYNTITPVLHIEGQ EDDFED
HP0291	1765	GGAGTTGGAAGTCTTAATCGCATCGGGGTTTGAATACACCGCATCAAGAAAAGGCTATCGCTGAAATTTCAA AGGATTTAAGCTCTACAGGGTGATGATAGATTATTGAGTGGGATGTTGGGAAACAGAGTGGCGAT GCATGCGATTTTGGCGGTTTGAACGGCTTTCAAGCGCTTTAGTGTGCTACCACTTTATTAGCGCACCGCA TTTGAGACTTTAAGGGCGGCTTTGAAAATTTTGGCGTTAAAGTGCTGTTGGACAGGTATCGGAGCGGAAAAA ACAAGCTTTTAAAGCGGGTGGAATTAGGGCAAGTTGATGCGCTAATAGGCACGCTATGCGATTTAGCGCGGAAATTC AAAACCTGGGCTTGGTGGTGAAGAGCATAAATTTGGCGTGAACAAAGAAAGCTTTAAAGAAATTTGAG TAAGAGCGTGCAATTTTAAAGCATGTCCGCTACGCTATCCCGCGCACTCTAAACATGGCGCTCTCTCAAAATTAAGG GCATTAGTCTTTAAACCCCGCCACAGACAGAAAGCCAGCGCACTTTTGAAGAAAAGAAATGACGAATC TTAAAGAGATTTTACAGAGAAATACGCGTAACGGGCAATTTTACATCCATAACCAATGCTAGCATTTTAA AAGTCAAAACCAAGCTAGAAATTAATCCCTAACTCAAAATCGCTATTTGCAATCCAGATTAACGCTAATGAGA GCGAAGAAATCATGTAGATTGCGAAGGAAATATCAGGTTTATATGCACTTCTATTGTGAATCAGGGATTG ATTTGCTTAACGCTAACACGATCATATAGATAATCGGCAAAATTTGCGGCTGGCTGATTTGCACCAATTGAGAGGG CGTGTGGGAGAGTAAAGAAAGGCTTTTGTATTCTCATAGAAAGATCAAAAAGTTTGAATGAACAGGCTTTA AAACGCTTGCTCGCTTG	1766	ELEVFKSHAGFEYTSIQEKAIAEISKDL SSHRVMDRLLSGDVGFGEVAMHAI FCAFLNGFQSALWPTTLLAHQHFETL RARFENFGVKVARLDYASEKNKLLKA VELQVDALIGHTHAILGAKFNGLVW DEEHKFGVKQKEALKELSKSVHFLSMS ATPIPTLNMALSQIKI3ISSLKTPTDR KPSRTFLKEKNDELLKEIYRELRRNGQ IFYIHNHIASILKVKTKLEDLPKLKIALH SQINANESEEMLEFAKGNVQVLLCTSI VESGIHLPNANTIIDNAQNFGLADLHQL RGRVGRGKKEGFCYF'LIEDQKSLNEQ ALKRLLALEKNSYLGSGESVAYHDLEIR GGGNLLGQDQSGHIKNIGYALYTRMLE DAIYELSGGK
HP0291	1767	TTCITTTGATCGCTTCAGTGTATTATACGCTTATGGCACAGGAGCGATTAAAGGCTTTGCCCTAACTACAGGCATTGG GATTTTAGCCTCTATTACCGCTATTGTTGGCACGCAAGGATTTATCAAGCCCTTTTACCTAACTCACTCAAAC AAAAGCCTTTACTTTGGTTGGCGTGAATAAAGAGCTTAGGAGTTTATGGAATTTTCAACGAACTAGAACTCT TAAGCTTCATCGCTTATCCAAATTTAGGGTATCGTTTACGCAATTTTAGCGCTTCTAGCGTTGGGCTTTTGT CAAAGGGTTTCTTTAGGGATTGATTTTGGGGGGGAGTTTGGTGCAAGTCCGCTACACTCAAAACGCCCCCATTA AAGAAAGTGGCGCATCTGTTTGAAGAAAGAGCTCGCTTCAAGGCGTGCAAGTGAAGTATTTGGCTCTAAAGAGAA ATTTTAAATCAAAATCCCTTTTGTAGAAACGGCTGAAATGAAGATCTGAACGCTATCGTGCCCAACATTTCTAAACCC AGCGGCGATTTTGAATCCGTAATTTGACACCGTGGCCCTAGAGTGGGAGCGAATTTGAAGAGAAAGGCATTT TGTCGCTGATTTAGCATTAATAGCGATCATGTTTATGTAGTTTCCGCTATGAATGGCGTTTTCGTTAGCGAGCG TCATTGCGCTTGTCATGATGATTTTGTAGTGGCAAGCTCGGTGATTTTGAAGATTGATATGAATTTGGAAGTGA TTGCGGCTTGCTCACCCTGATTGGGTATTCATTAATGATACGATCATTTTGTAGAGGATCAGAGAGAGATGC TCTCTCAAAAACCAACGCCACTCAAGCCATTGATGAAGCCATTTCTAGCACGCTCAGCGCAGCTTTTAACTT CTTTAACCGTGTTTGTGGTGTGATTGTGGGTTTGGGAGTAAGATCATCATTTGCTTTTTCATTGCCCATGTT AATAGGCACGA	1768	SLIASVLLYAYGTGAIK'GFALTGTGIGILA SIITAIVGTQGIYQALLPKLTQTQKSLYFW FGVKNKRA

HP0874	1769	TTTGACAGAGAAAGAAATCCCTGAAAGGGTGGTGCGATGCTAAAGGAAGCGGAGCTTATGGCACTTTCACTGTGACTAAAGACATCACTAAATACATAAGCGAAATTTCTCTAAAGTGGGCAAAAAACCGAATGCTTCTTCAGATTTTCTACTGTGGCTGGTGAAGAGCGAGTGGGATGCGGTGAGAGACCTAGAGGTTTTGCGATGAAGTATTACACTGAAGAAGGTAACCTGGGATTTAGTGGGAACAACACGCGCTGTTTTCTTATCCGTGATGCGATCAAAATCCCTGATTTTCATCCACACTCAAAAACGAGATCCTCAAAACCAATTTGCCTAACCATGACATGGTATGGGATTTTGGAGTAAATGTTCTCTGAAAGCTTATACCAAGTAACATGGGTTATGAGCGATAGGGTATTCCTAAATCTTCCGCCACATGGATGGTTTTGGCAGCCACACTTCAGTCTTATCAACGCGAAAGCGCAACGCTTTGGTGAAATCCACTTACACCATGCAAGCGGTTAAGCATTTGACTAACGAAGAGCGCGAGAAGTTAGGAAGTATGATCCGATTCCAATCAAGGGATTTATTCAATGCGATCGTAGAGGGGATTTCCCAAATGAAATTAAGCATTAAGTATGCCAAGAAGATGCTAAGAAGTATCGATTCCATCCGTTGATGTAACTAAATTTGGTATCTCCAAGATTATCCATTGATGGAAGTGGGCAATTGTGGAGTTGAATAAAATCCTGAAAACCTATTTGCGAGAAGTGAACAAGCGGCATTCAGTCCGGCTAATGCTTCTGGAATGGCTATAGCCCCTGATAGGATGTTACAAAGGCGCTTGTTCTCTTATGGAGACACACCGCTAGCGCTTAGCGGTTAATTATCCTCAAAATACCGGTTAATAAACCAAGATGCCCATTCCTCACTCTCTAGCAGAGATGGTTACATGCAAAACGGATACACTACGGCTCTTTACAAAACCTATACGCCCTA	1770	FDRERIPERVWHAKGSGAYGTFTVTKD ITKYTKAKIFSKVGKKTCECFRFSSTVAG ERGSADAVRDPGRGFAMKYYTEEGNW DLVGNNTPVFFIRDAIKFPDFIHTQKRD PQTNLPNHDMVWDFWSNVPESLYQV TWVMSDRGIPKSFHRHMDGFGSHTFSLI NAKGERFWVKFHFTMQGVKHLTNEE AAEVRKYDPDSNQRDLFNAIARGDFPK WKLSIQVMPEEDAKKYRFHPDFVTKIW YLQDYPLMEVGIVELNKNPENYFAEVE QAAFSANVVPGIGYSPDRMLQGRF SYGDTHRYRLGVNYPQIPVKNKPRCPF HSSSRDGYMQNGYYGSLQNYTPSSLP GYKEDKSARDPKFNLAHIEKEFEVWN WDYRADDSDYYTQPGDYYSRSLPADEK ERLHDTIGESLAHVTHKEIVDKQLE
HP1382	1771	CGGGCAAGATATTCCTGCTTAAGCGACACCAAGAACTTAATTTGAAATTAAGGGAAAAAATGATAGCGTCCA GCCAGGAGAAAGATGGAAATCCCATGGACTAATGGAATTTGTTCACTCAAGTGGTGAATGGGAAGTATGAAG AAATTAAGAAAGACATCAAGGTCAATAACGCTCAAGAGCTTTAAACAGGCTAGCACTATTTAAACCACTCTTAA TGAAGCATGCCATGGTTAGTAATGGTGGTGCAAGCAATGTGCGCGTGGCAATAGTTTATGGCGCGGAATAGAT AAAGCGACGGGAGCGCATGCGGATTTTAAAAATGAAATCAGCGGATTCAAGACATGATCAAAAAACGCTGAAAT AGCGGTAGAGCAATCCAAATCGTTACGGCCAAACGCGCAAAACCGACACCACTAGACACTGGGAAAGCATTC AAC CCCTATAAGACGCCAACTTCGCCCAAAGCATGTTCGCTAACGCTAGAGCGCAAGCGGAGATTTTAAACCGCGCTC AAGCAGTGTGAAGGAATTTGAAAGAAATCCCTGCAGCGTTCTGTAAGAGACTCTTAGGAGTATGCCATGAAAAAGGCT AGCGACGGCAATCTCGGTGGCAGCGCATCTGCGACGGTTACTTCTAACACTTGGGGAGCGCGCTGCGCGTATGTG GGAGAAACCGTAACGAATCTAAAAACAGCAT	1772	GDIPALSDTKELNFEIKGKKNDSVQP GERWKFPWTNGKFSVSVKWNVGKYEI KEDIKVSNNAQELLKQASTILTTLNEAC PWLNSGGAGNVAGNSLWAGIDKGD GSACGIFKNEISAIQDMIKNAEIAVEQS KIVTANAQNHNDTGKAFNPYKDNF AQSMFANARAQAEILNRAQAVVKDFE RIPAAVFKDSLGVCHKEKSGDGNLRGTP SGTTSNTWAGCAVVGETVTNLKNS
HP1382	1773	TGAGAGAAGAGGGAACCCCTATCAAAATGGCTTGAACGAAGCCTTACAAACGCGCTTTTAGAAAAATAC GCTTATGTTAAGGTTTAGAAGAGCCTAAAGACAAAGAAATGCGAGAGTATTGAGGAGGTCAGGCTTTTGGCG TTTAAATGGTAAGGCATGTTTATTAAAGTTGAAGTGAAGCAGCATTTGCAAGTTTATGTTTTCGCAAAATGAATG AATGATGAGTTTAAAGCTTGAAGAGCATTTAGAAGTGGCGATATTGTTGGTGAAGGCTTCCCTTTTGTCTACC AAAACCGGTGAATTAAGCATTCATGCCCTAGAAATTCATAATTTAAGCAAAACCATTTGCGCTTACCTGAAAAATTC ATGGACTGAGCGATATAGAAATGCGTTACCGCCAGCGCTATTGGATTGATCGTCAATCCTAGCGTTAAAGATGTG TTTAAAAACGCGCAGTTGATGCTCTAGCGTGGGAAATCTTTGAAATGGAAAGGTTTATAGAAAGTGGAAAC	1774	REEGKNPYQNGLKRSLTNAAFLEKYA YVKGLEPKDKCEKESIVGRVKLLRLM GKACFIKVEDESTILQVYVVSQNELNDEF KSLKKHLEVGDIVLVKGFPPFATKTGELS IHALEFHILSKTIVPLPEKFHGLSDIELRY RQRYLDLIVNPSVKDVFVKRSLIVSSVR KFFEMEGFLEVE
HP1382	1775	CTTCGCCCTCACCCCTGCACATGAATGATGGATTTTAGAGCGTTTTGCCAAAAACCCATAAGTGTGCAAGAGTATCC ACATGCCCTTACAGAGCGGATCTAGCGCGGTGTTAAAGATGATCGGAGGGGTATAGTAAGGAGTGTGTTTTTAAAT AGGGTGGAGAGGTTAAAGCTTTAGTGCCTGAAGTGGCATTAGCACGGATATTATCGTAGGCTTCCCTAATGAGAG CGATAAGGATTTTGAAGACACAAATGGAGGIG	1776	SPHPLHMNDGFLERFAKNPKVCKSIH MPLQSGSSAVLKMRRRGYSKEWFLN RVERLKALVPEVGISTDIVGFPNEDK DEEDTMEV

HP1382	1777	CCAGCAAGCTTTAAAAATCAAAGTGGGTTTCCTGAATTAGGGGGAACGGCACAAAAGTGAGTGTTAATTACAATTA CGAATGCAGACAACTGCTGATATCAACGGCGGTGTGTATCAGTTCTGCAAGGCTAAAAATGGTAGTAGCAGTA GTAATGGCGGTAATGGCAGTAGCACGAAACACCGGACACACCGGACGCGGTAAACGATCACCACTACCTA TAATAAACAAGCCACCGTCAATTTGACATCACCAATAACGCTGAACAGCTGTTAAATCAAGCGGCAACATCAT GCAAGTCTTAATACGCAATGCCCTTAGTGGTCCACGAATAACGAAACACTCCAGGGGTGGTCAACCATGG GGTTAAGCACATCCGGGAATCGGTGAGCATCTTCCAAACAAGATTTAGCCAGGTTACTAGCATGATCAAAAACGC CCAAGAAATATCGCGCAAGCAAATCGTTAGTGAACGCGCAAATCAAAACAACTTGGATAGTGGAAACCAT CAACCTTACACGGACGCCAGCTTGGCAAGCATGCTCAAAACGCTCAAGCGCAAGCAGAGATGTTCAATTTGA GCGAACAAGTGAAAAAGAACCTTGGAAAGTCATGAAAAACAACAATAATGTTAACGAGAAATTAGCAGGATTTGGGAAA GAAGAAGTAATGACCAATTTTGTAGCGCTTTTGGCAAGCTGCAAGATGTTGCCACATTCCTAATGCAGGGGT TACTTCAACACTTGGGGGGGGTGGCGGTATGTTGGAGAGACGAT	1778	QQALKNQSGFPELGGNGTKVSVNYNY ECRQTADINGGVYQFCKAKNGSSSS NGNGSSTQTATTATTTQDGVTTTTYNN NKATVKFDITNNAEQLLNQAANIMQVL NTQCPLVRSTNNENTPGGQGPWGLS TSGNACSFQEQFSQVTSMIKNAQEIIA QSKIVSENAQNQNNLDTGKPFNPYTD ASFAQSMKNAQAQAEAFNLSEQVKK NLEVMKNNNNVNEKLAGFGKEEVMTN FVSAFLASCKDGGTLPNAGVTSNTWG AGCAYVGET
HP1382	1779	CCTTTAAACCATGCTAAAAAACAAGCTTGAATGGGTGGAGATTGTAGGGTGGAGCATTTGGATAAAGTGAT TTATTTAGATCAAGCCCCATAGGCAAAACCCACGAAGCAACCTGCCACTTACACGGGAGTGATGATGAAATCA GGATTTTATTTGCCGAGCAAAAAGAACTAAATTTAGGTATAGTGCAGCGGTTTAGCTTTAATGTTAAAGGAG GGCGGTGCGAGAAATGCCAAGCGGATGGGACATTAATAAGAAATGCACCTTTTGCCGTGATGTGTTAGTCCAATGC GATAGCTGAAGGGCGCTAAATACAAACCCCAACTTTAGAAATCAAGGTGAAGGCAAAATCCATTGCCGATGTGT GAACATGAGCGTGAAGAGGCTTATGAATTTTGTCTAAATCCCTAAATCGCCGTGAAGTTAAAAACGCTTATGGA TGTGGCTTAGGCTATATACCTTAGGGCAAAACGCTACGACTTTAAGTGGGGGAGGCTCAAAAGGATCAAAATTAG CTAAGAATTGAGTAAAAAACACACAGGCAAAACCCCTTATATTAGATGAGCCTACTACCGGTTTGCAATTTGAAG ACGTGAATCATCTTTACAAGCTTTCATCTTAGTGGCGTTAGGCAATCTATGCTAGTGAATGAGCATAAATTTAGA CATTATCAAAAACGCTGACTACATTATAGACATGGGCGCTGATGGGGGAGATAAGGGCGGGAAGTCAATTCGGAGC GGCAGCGCTTTAG	1780	LLNHAKKTQSLNGVEIVGLEHLDKVIYL DQAPIGKTPRSNPATYTGVAIDEIRILFA EQKEAKILGYSASRFSFNKGGRCCKC QGGDIKIEHFLPDVLVQCDSCKGAK YNPQTLEIKVKGKSIADVLNMSVEEAY EFFAKFPKIAVKLKTLMVDVGLGYITLGG NATTLSSGGEAQRIKLAKELSKKDTGKT LYLDEPTTGLHFEDVNHLLCIVLHSLVA LGNSMLVIEHNLDIKNADYIIDMGPDG GDKGGKVIASGTPL
HP1382	1781	AGCTAATGGAGATGGGTCCTCCGTTTAAAGCAACACCACTACAAAACCTTGATTTCACATATCAATGGAGACAAAAGAA CGGGGGGCAACCAATACACCTGAAAGTCCCATGGAGTGATGGGAATATATTCACACCCCAATGGATGAAACACA ATAGTAACACCAACAGAAACAATATCAACACAGAAATAACGCTCAAGAGCTTTTAAACAAGCGGACATCATATC ACTACCTAATGAGGCTGCCCAACTTCCAAATGGTGGTAGAAGTTATTGGCAAGGGATAAGCGGCAATGGGA CAATGTGCGGGATGTTTAAAGATGAAATCAGCGCATCCAAAGCATGATCGCTAACCGCTCAAGAAAGCTGTGCGCGCA AAGCAAAATCGTTAGTG	1782	ANGDGVPLSNTTTKLDFTINGDKRTG GKPNTPKFPWSDGKYIHTQWINTIVT PTETNINTENNAQELLKQASIIITLNEA CPNFQNGGRSYWQGISGNGTMCGMF KNEISAIQGMIAQAQEAQAQSKIVS
HP1382	1783	GATGGAAGACTACGCAAGCAGAACCGCTGGAGCACTGGAGCACTTGATAAGATTGTTGAAAACAGAACAGAGAAT CAACAACTAATTTGGACACAGAAATTTGAAAATAATTATTGAAACTTTGAGAAAGTAAATCAATGGGAATCAGCAAA AGATGCTTGATAAAGTAAAGAAATGAGCAGAAATTTAAGCTTGATAGCACTAAACGAGATAGACGCAATTAAG ATTTGATTAAAAGGCTAATGAGCAATAGCCCAATTAATGAGATGATAAGGATATTGAAAAACAGAAAAAGATT GTAAGGAACAACCTTGAAATTTCTAGTCAATGAATTTAAAGTGATATACAAGATATAATAAAAAGTATTGCGGTTT GGAGAAAGGAATAACAATTTAGAGAAAGCAATTAGTGAATCAAGAGAGTAAAGAAATTAGAAATGAAATTA GGAATTAGAAAAAATGTAAGCATAAAGCCCATTTGTCATGAATCAATCAATCGCTTTTAAAGGGTATGGATTCGC GAATTTTAGTTGGCATGCACTGAAGATGAAAAATTTTATCGTATTCAAGAGAGATGTCATTAATGAGAGAAC ACTGAGCGAGGGTGAAGTTACTTTTCATCACTTCTTATATTATCATTTAGCAAAAGGCTCTTTAGAGAGAACGAT ATATCAAAAAATAAGGTTTATGATGATGATGACCCCATTTCAAGTTTGGATAGCAATATATTGTTTATAGTGAGTGT AGTTAAAGATCTTATGAAAGAAGCCATGGAAGAAAAAACAACATCAAGCAAGTTATTATACCAACCCACACACATA TTTTTACAAGGAAATTACATTAGAAATGATTTAAACGCTATCAAGGGAATATCTTTTGGATAATTAAGAAAGGATA ATAATGTTTCAAAAAATTAAAGATTATAAGAAAAATCCCATTAATAATTCCTATGAATTCCTATGGCAAGAAAGTAAAAACAA GCA	1784	MEDYASRTAGALERLDKIVETEKNQ QTKLDTENLKIIETLRSKINGNQKMLD KSKEMSRNFKLDSTKNEIDAIKDLIKKA NEQIANYNEMIKDIEKQKSKCEQTKW FLVNEFKSDIQEYNKKYCGLEKGINNLE KAISENQEVEKKLENEIKELEKTMVSIK PIVNEINTLLKGYGFANFSLACTEDEF YRIQREDGQLVGETLSEGEVTFITFLY YHLAKGSLEENDISKNNKVLVIDDPISL DSNILFIVSVLVKDLMKAME:EKTNIKQ VIILTHNTYFYKEITLECDLKRYQGYKYSF WIKKDNVNSKIDYKENPIKNYSYELLW QEVKQAKENNASWVSLQN/MRRIEY YFRILGGFKHNDLSSECFENIEEKVRC NSFISWFNDGGSHGSDDLFWIQSDTSI ETYLKVFEEKIFKETGHEAHYKMMMRM K

HP1382	1785	ATAAAGTCGCTATCGCGCACCATTAGATGACGCCGTAGAGAGCTTTTATGAATTCACCTTATAACGGGAGTTTGA GGAGCATGCCCCCATTTATAGGCTGAAACGGCTTATTGGTGATCCGCCCTTTGATTAGGTTTCGAGAAGCTAGC AGCATTCAATTTGTCACTTCTCAAAATATCCAGTCCCTGATTTGCCAGCCAAACAGCCACCTCTGAT AAGCCCTATCGCACGATTAGCCACCAAAATTTCTTAAAGAA	1786	KVAIAHLD DAVESFFMFTYNGSLRS MPPIYRAENGLLVIRPLIKVREASSIHV TSQNPVAPDCNCNCPAKQPTSDKPPAR LATKNFLKE
HP1382	1787	TCTCTAACGGGCGGCGGATCCTTAAGCTTGCAAGAAATGGCGAAATCAAACTCACTAATACGCTAAATC CCCATGCTTGGCATTTGCTTAGGCGATCAATTTGCTCTCTATCGCTCAAGGCTACCTACTTACAAGCTCAAAATTTGGT CATCATGGAGCAACCCCGTTAAACCTTAAACCAACCGCGTAGAATCACCGCGCAAAACCACTATTG CGTCCCTGAAGACATTGAAGAAATCGCCATTATCACGACCGCAATCTTTTGACAAACCACTTGAAGCGGCGGT ATAAAACGCTCCCATTTATCTGTCTCAGCACCCAGAAAGTAGCCAGGCTCTAAAGAGAGCCACTATATTTTA AAGAAATTTGTGAATTTGTAAGGATTTTAGGGGTTTAAACAGCGCTTATAGAGACTGAAAGCGCTTAAAAAT AGATTTAAATCTTTTATCAAAATCTCGCATTTACTCTAAATAGTTTCTTACAATAGTATTTCTCTCGCAATAATTGT TATTGTTATTGGACAAACTTTTAGAAGGAGTTATTATGGAGTATCGGTAGTATGGCAACCTATTGAAGGGTT TTTAGTGGCAGCCATTGAGTTTCTGTGCTGCAATTTGCAATAGCCGTAAGGATATTGATCACAATATTGAAGCATTA AGAACCCTTGCATGCGACTAAAGCGGGGTATCCGGAGTGGAGCTTATCATTTCCCTGAGTATAGCACGCAAGGTTT GAATACCGCTAAGTGGCTTAGCGAAGAGTTTATTAGATGTCGCGGTAAGAGACAGAG	1788	SNGPGDPLSLQGEIGKQLINAKIPML GICLGHQLLSIAQGYPTYKLKFGHHGS NHPVKNLKTNAVEITAQNHNVCVPDI EEIAITHRNLFNDTIEGVRYKNAPIISVQ HHPESSPGPKESHYIFKEFVELLKDF
HP1382	1789	CTACACATGCTCAGGGCAAGGAATAATACTGCTCGCAAGTGTCAACGGAACCAACCAACCAACCAACCATAG ACGGCAAAAGCGTAACCAACGATCAGTTCAAAAGTGGTGGTAGCATCGTAGTGCAACACATCAGTGTATC ACCAACAAATTAGACGGTGTGCTGATAGCGCTCAAGCGCTTAGCGCAAGCGGACGCTCATCAACACCATCA ACGAAGCATGCCGCTATTTCCATGCTACTAATAGTAGGCTAACGCCCAAAATCTCTACTACTACTGGGAAA TATCGCGGCTTTTCAGAAAGAAATCAGCGGATCCAAAGATGATCAGGACCGCAAGAGCTAGTTAATCAACG AGCGTATTAAACAGCAACGAACATCAACTCCGGTAGGCAATAATATGGCAAGCTTTCAACCTTTACGGACGC AAGTTTTCGCAAGGCTGCTCGCTAACGCTAGCGCGCAAGCTAAATGCTCAATTTAGCCCATCAGGTGGGCAA GCCATTAAACCCAGAGATCTTAGCGAGAAATTTAAATTTGTTACAGGCTTTTAGCCACATGCAATAACAAATCAA CAGCTGGCACTGGTGGCACACAAAGTTAGCTCCAGGACAGTGACCACTCAAACTTTGCTGCTGCTGCGCGTA TGTGGAGCAACCTAACGAACCTTAGGCAACAGCATCGCTCAGTTGGCAGCTCAAGAGC	1790	YTCGQGNNCSPSVNGTKTTQTID GKSVTTTSSKVVGSASGNTSHVITNK LDGVPDQAALLAQASTLINTINEACPY FHATNSSEANAPKFSTTTGKICGAFSE EISAIQKMITDAQELVNQTSVNSNEQS TPVGNNGKPFNPFTDASFAQGMLAN ASQAQKMLNLAHQVGOAINPENLSENF KNFVTGFLATCENNKSTAGTGTGSSA PGTVTTQTTFASGCAYVEQTLTNLNSI AHFGTQE
HP1382	1791	GGACCACACAAACAATATCATAGAGCATTTATACAGAGAAATGGGAAAGAGATCCAGTCTCTATTACGGC GGATCATCTCTCGCTACAAATACAAATGACATACCAATACGCTGAAACCTTTTGCAACAGCCGCCACTATC ATGCAAGTCTTATTACTCAAAAGCCGATGTGCAACGAGCAATGGCGTAAAGCGTGGGGTTGAGTTCTACGC CTGGGAATGTGATGGATATTTTGGTCTCTTTAACGCTAATATGAGATGATTAAACGCTCAACAGCCCTAG CAAAACCCCAACAGCTTAACGCTAATGAAACGCCCAATCACGCAACCAATTTCAACCTTACACCTCTAAAG ACAAGGGTTCGCTCAAGAAATGCTCAATAGAGCTGAAGCTCAAGCAGAGATTTTAAATTTAGCTAAGCAAGTAGCG AACAATTTCCACAGCATTAAGGGCTATTCAAGGGATTTAGAGAAATGTAAGCAGGATCGGCTGGCGTATCAC TAATAACACTTGGGTTAGGTTGCGGCTTTGTGAAAGAACTTTAAACTCTTTAGAGCAACACACCGCTTATTACGG CAACCAGGTCATCAGGATAGGGCTTTGGCTCAACCATTTTGAATTTTAAAGAAAGCCCTTAACACCCCTGAATAA	1792	TTTQNNIIEHYTENGKEIPVSYSGSS FSPTIQLTYHNNAENLLQQAATIMQVLI TQKPHVQTSNGGKAWGLSSTPGNVM DIFGPSFNAINEMIKNAQTALAKTQQLN ANENAIQITQPNFNPYTSKDKGFAQE MLNRAEAQAEILNLAKQVANNFHSIQG PIQGDLECKAGSAGVTNNNTWGS GC AFVKETLNSLEQHTAYYGNQVNDRA LAQTILNFKEALNTLNK

HP0150	1793	AGAGCCTGGGATTTATATCCCTGGGTTTTGGGGTGGCATTGAAGATTTAGTGGTGATCAAAAAATCTAGGCTCTGA GCTTTTGTGATGCGAGAGATCCTTACTAGCCGCTTTTCCCTAGCCTTTTAAAAAAGGCTTGATTTTCTAACAGG GTGGTTTTAGGGTGGGATCTAATCTTAAATCCCTTAAATATTAATAATGTTTTGTATTTTAAAAATCATAG TAAATCGGGAAATTTTTCTCGCCCATTTATCAATCCGCTTTGGTTACACTAAGCAACCTAATTTTATAAC GCTACGATCATCCTTAAACATCTTAAAGTTTGGCCATTTTCTCTGTTTTATATAGAAAGCGTTTTGGCC GCCAAGGAAGCGGATTTAAAGACGCTCAAGAACTTAGACATTTGATATTATCGCTTTCAACCAAGTCATTTTAA GACAGATGATTTGGCTTTACCTCACCTAAATGGAGTGAAGGGATTCGGTGTAGTCCGCTTGAAGCTTTAAAGATCGCT ATTCTTTTAAAAAAGGGGAGTGGTGAATTTCTATACCTATAGTGGGAGACGGCCGCTGAAGCTTTAAAGATCGCT CAAAGCCACCATGGGGTGGATACGCTGGTGTAAACCCCAAGAAATCCGTAAAAAAGCTCACCTCTCTGGGCT TTATGAATCGTTGTGGCGTTGAAGAAGAAAGCGAAACACCTCTAAGCCCCCTTATCTGAAAGTTTGT TGATGAAGAATTGAATGAAGAAGATGTGGTCATGACGCTTCAAGCACTGTAGAAAGAAATGCGCAACTCGCCGGG GTTTCATCCAGCCAGCCATTATAGTTTTCAAAAAATAAGACTCTTTAGAAAAAGACGCTCCATTAGAGGATCGG CCTTTAGAGGCTAATAAGCAAGACGCTTTATTGCAAGCTTTTAAAGATGAAGCCCAACCATAAAAAGAAAGAGAAAA AGAGAAAGTTAA	1794	EPGIYPGFFGVRIEDLVVIKNSRSELL
HP0150	1795	CGGACACTAAGGTGCTTATTACAGATTGAACATGCCTGAAATGAACGGCTTAGATCTCGTTAAAAAGGTGCGCTCT GATAGCCGTTTTAAAGAAATCCCTATTATCATGATCACACAGAGGGCGGTAAAGCTGAGGTGATACGGCTTTGAA AGCGGGCTGAACAACATACATTGTGAACCTTTTACCCCCAAGTTTTGAAAGAAATTAGAGGTTGTTTTAGGGAC AAACGATTGAGTTAAAGCCCAATGATTATGAGTTTTCTTATCTCCCTAAGGAGCGGAGCTTTTGAAGAGCTTT CTTTTAGACGCCACGCTAGCATTAGAAGATCTAGCTTAGAATTTAAAGCGTTTGAACGATAAAGAAACCAT GGGTTTAAAGCCCAATCCCAATTTGCAATTTTACGCTCATGACCCCTAAAGAAATCTGAAAGAAATTTAA GAAACCTCCACATCTCAAAATTTTCGTTATTTACGCTCTCAAAAGGATTTGAATAACTCGCTCATCCAGCATTAG AAGCGTTTGTGAAATTTAAACAAACCTGCAAGTGAGTTGATTTTCTATCTTACGCAATCTGGCTTCAAA AGATTGGCTAGAGCCCTAGCAACCAAGCTATTTGCCGGTGCAATGCACCAATTTTACATACACCCCTAGCTGGCATCA AAAGCCCAAGCCATGTTGTTACAAATGATTGCATATGATTGATCCGCTTTGGCTTTGGATCAGGCCATCATGAAAG CACTTCTATGTTTGGAACTGCTCTGACATTTAAACGCAAAACGCTTAGATGTGGTTGTGGGAGCG GGATTTTAAAGCATCGCTTTAAACAAACAGCGTTAGCGCTTTAGTGTGCGATACGGATAGTTAGCCGTTGAAG AAACCCCTAAAAAATTTAGCTTGAATCAATACCCCTATTAGTGCAAGATAAAGTCATTTATGGCTCTACGCAAAAAAT TGAAGGGCG	1796	DTKVLITDWNIMPEMNGLDLVKKVRSD SRFKEIPIIMITTEGGKAIEVIT/ALKAGVN NYIVKPFPTQVLKEKLEVLGTND
HP0150	1797	TATGGATATTTTACTCAATCGCCATTTAGCTAGCCCTGTTATGGTAGGAAAGAAGTCTTATTGGACATGCTCACTCA GCTAGATAAAACAAATTAGAAAAATCCAGGATTTAGCGGTGCAAGAAATTTGTGATCATCAACGATCTGGCGTTAGG GCATGACGCTTCCATTATCCAAATCTTTTCAGCCGATCTGAGCTTTGAAATTAATCAAGCAACCCGAAATTTGAT GATGAAACGCTCTAGCGGCTATCGTATCCATAAGGTTATGAACCCAGCGGATCCCGTTACGACTGAAGTGGCTAA GCAGTTTGTCAAAAAACTTTTCTTGATCCAGAACGCTATGATTTGACCATGGTGGCCGCTGAAATGAATCACAA GTTAGGCTTGCATGTGCTGATTACATTACGACTTTAACGCTGAAGATATTACCCACCGTTAAATACCTCATGAA GATCAAAACAAATCAAGGCAAGATTGATGACAGGGACCACTTGGGCAATCGTAGGATTAGGGCGGTAGGGAAATTG TTGGCCCAATGAATTGCATTGAGTTTGTGAAATGCAAAAGACCAATTAAGACAAAGCTCACTACCATGAGCGGGC TTTTGATTCGCTCATGCCCATGACTTGGTCAATTTCTAAATGATCACAAGCACCATCATGGAATTTTTCATGGCGG TCAGCTCTCGCAATTTATGGATCAACGAATCCCTTGAAGTGAAGTACGCAAGCGCCGCTTTTTCAGCGCTCGGC GAAAGGGGTTGGTGAAGACAGAGTGGGTTTGAAGCCAGGATGTGCACCCACGCTTATGGCCGAATTTGT CCCATTTAGACCCCAAGGTCAAATATCGGTCTGATCAACACCTTTCCACTTTTACAAAGAGTGAATGATTTAGG CTTTATTGAAGCCCTTATAAAAGGTTGTGGATGGCAAGGTCTGGTGAGACGATTTATTGACCGCTATTCAAG AAGACAGCCACATCATCGCT	1798	MDILLNRHLAEPVMVGKEVLDMLTQL DKNKLEKIHDLVQEFVINDIALGHDA SIQSFSADESSESLKLLKQTEKIDDENALA AIRHKVMKPGDPVTTTEVAKCIVKCLFF DPERYDLTMVGRMKMNHKGLHVPDY ITTLTHEDIITTVKYLMIKNNQKIDDR DHLGNRRIRAVGELLANELHSGLVKMQ KTIKDKLTTMSGAFDSLPHIDLVNSKM ITSTIMEFFMGGQLSQFMDQTNPLSEV THKRRLSALGEGGLVKDRVGFCEARDV HPTHYGRICPIETPEGQNIQNLSTFT RVNDLGFIEAPYKVKVDGKVVGETYLT AIQEDSHIAPASTPIDEEGNILGDLIETR VEGE

HP0150	1799	AAAGCGAGAGCGATTTTGAAGAGTGTAAAGATTACAGAAACGCTGCAAGAAACTATGATTTTGGCGGTTCA GCAAGATTGATGAGCATTTAGACAAATTTGTTATCCCTTATTTCAACAACGCTGCAGAAAGGAAATTTTCCCTGATTT TATCTTTTGGCTAGAAAGGCGGACGACGATCATTTGCTTCATTGATCCTAAAGGGAGCAACACACTGATTACG AGCATAAGCGAGATGCGTATCAACTTTTAAAGATAAAATTTTAAACCCCAAGACAATCCCAATCTCAAAATCAAAGT GGTTTTAAATTTTATGGGATAAAGATGAGGTGGCGGATGTTATAGGATTACTGGATTAAATAAAAGGGAAACTAG AAGATTTTCTAAACAATTAGCCTAAATTTTATTGAAAGGGTTAAAGATCCGCTTATTAGCCTTG	1800	SESDFLEELLKITETLQENYDFWAFSKI DEHLDNLFIPYFNNAERKFFPDFFIWL EKGGTQICFIDPKGSKHTDYEHKADAY QLFKDKIFNPKNPNLKIKVWLKFGYGD DEVADGYRDYWIWKGLKLEDFFLKQLA
HP0150	1801	GGGATAGCTCTCTGTTATCATAGCAATGGGTGCTGCTTAGCCCTAGCTAATTATTTTCATGGCAGATGAAG AGAAACCCCATTTTATCGCTATGGATGCCGAACCCCAAGTGAGCATATTTGCCACAACGCCCAAGAGAGCGAGT CAATGGAAACGCGGATTTGACAAAGAAAGAGAGAAATGGTAAATAATATCGGAATTTAACCCCTTTTAAAGCGT AAAAGAACGCGCATGCTTTAAACGGGATTTTATGAAAGAAAGAAATTTATGGAGGCAAGACACGAGCAAAAGT GATTAGCTGTTATGACATCACTAAAGAAATTGTATAGCAATTATAGGAAGTGAATGAGAAAGTCCCTCCAGAGCGATA CAAATCTTTGTATAACACTATCAGCCTGTTTACACATAGAGGGCAAGAGATGATTTTGAAGATGATTTTGTATCTA GAATGATTAAAGATTGCCAAGCATCAAAACAACAAAGAGGTGATCAATGCCATAAAAGAGCTATTAAAGATGTCAAA GAAAAGGATTTTAAAGACTTCTTAAAGAGCCAAACAGCACCGCCTATTGTTTCTATACAGATAATGATTGTGAT GGCATGTTAGCTGGCAGCGTTTAAATGCTATGTGTACAGATTGGGTATTAAGATTTCTTTTCTTAGCCCCCTTAA GG	1802	DSSVYHSKWVRPVLALANYFMADEE KPHFIAMDAETQVEHILPQTPKRGSQW NADFDEKREEWVNNIANLTLLKRKK AHALNGDFDEKRIYGGKDTSKVISCY DITKELYSNYRKWNEKSLQERYKSLYN TITPVLHIEGQEDDFEDFDLE
HP0150	1803	CAAACCTAAACGCCCAACCCCTTATTGAATGTTTTAGGAGTTAATCTGCCAAAGCCAAATATTATTCTAAAAA AGAAGAAAGAGAAAGAAAGATGATCTTGAATTTTGTAGATATTTGAAATATTCTTTTGAAGCTATCCAAAAA CAACCAAGCCTGATTTTAAATAAAGACGAGCTTTTAGGGATTATCCTAATCTTAAATAATTAGATTCTTTAAGAG AAGTGAGGGAAGACTTTTGAAGAGAGCGTTTAAAGATGATGAAGCGATTGGAGCGTATGTGTAGTGTGCTT AGCTGTAAGTATTTGAGAGCGTGTGTTGAAAAGTTCAAGAAATGGCTAGATTTTATCGCTAGGCTTATTGCTTTGAGA GGCCATGTGCACAAGATAACTAAAGAACTTGAAGATTAGAAGAGAGGATTTAGAAAAATTGGAAAAACAAGCACTA GAATAJTAAATAAATAGCAATA	1804	NLNAPKPLFECFVGVLAKAKYYSKKE EREKEKMILNFKIFEILFEAIQKQPKP DFKNKDELLGDYPNLKNLDSLREVRED FLKRAFKNDEASLGAYVLVLLSCKYFE SVFEKVQEWLDFIARLIALRGHVHKTK ELERLEEEDLEKLEKQALEYFNKIAN
HP0294	1805	TTTTAGCCCAAAACGATCGCACTTACCGCTTATTAAATGGAGCGGTGGCTTTCTAAAAATTCAAACCCCTTG AATTGCTGCTTCTGCGGCTCTAAAGTAAGCTAAAGTTAGGATCAACGATTAAAGTGGGTTTTTCCAGCGG TTTAAAGCGTCTAGTGGTTATAGCCAAAGAGATGAACCTTGTTTTAACTTTAGAGGCTTAACTCTTATGGC GAAAACACGATAATTAAGAGTTAAACCTTAAACCTTAAATTAAGAAAGAGTTGTCTTTAAGGCGGTTAGTG AGCGGAGCGAGAGATTAAACCTATTATCGTGTAGAAAGACGACAGAAAGACCTTTTGTAGAAATTAAG CGTTTTCAAGAGAAAGGTGTTTTATTGCTGTAAAGCTAAACTTTAATTAGCGGATAAAATCTTGTAAATGAAAAATG ATTAAAGTTGGCTTAGTTATCCATGCTTGATGGGACAAACCTCAATAAATTGTATTTTAAATATAGCGTTGCGTG TGAGTGGGGGTTATAGTAAACATGCAAGTAATTTAAAGTTAATTAGATAATTAGGCACAATAGCCACAAAAAG TTTAAAG	1806	FLAQKTIATYRLNNGGWLKNSNPLN CCILARSKSAKVRINDLRWVFSQRLS VLVGYSQRDETFLTLEGLNTLMAKNY DNLKELNPLNYEEELSRLALVSGSE SINPIVLEERTEKTLFVEIKSVFQEEKV FYLL
HP0294	1807	TTAATGGGGTAGATCAATATCGCTAACGCTACCATCACGCAACATAACGCCGAATCTATTCAAGCTCTATGA CTTTTCCACGCAAGCATGGATAATTGCGAGAAATTGAATGGTCTAAATTTCAACGGCAAACTTTCGGTGTATGGCA CCACTTTCACTAACGAAGCTAAAGATGGGAAATTCATTTCAATGCAGGGCAAGCGGTTTTGAAACACCAACTTA ATGGAGGGAGTTACCAATTACGCGCGGATAGCTTGAATTTTCAACAAACACGCTTCAATAGCGGTTCTGTTGAA TTAGCGCAAAACGCTTCGTTCAATAACGCTAACTTAAACAACAGCGCTCTTTAATTTCAATAATTCTAACGCGAC CACTTCGTTTGTGGGGATTCACTAACGCTAATTCAAATTTGCAATTCGCCGGAAACGCTGTTTTGGGAACTCTAC TAATGGCTCTCAAAATACCGTAATTTAATAATACCGCTCTGTTAATTTCAAGGAATGCAACCTTTGATAATGTG GTGTTAATGGCCCTACGAACACGAGCGTGAAAGGCGAGTTACTTTAAATAACATCACTTTAAAAACCTGAACGC CCCTTTGTCTTTGGCGATGGACGATTACTTTTAAACGCTCATTCGGTGATTAATATTGCTGAATCTATCACTAATGG CAACCTATCACTCTTGTAAAGCTCTTTCTAAAGAAATTTGAATAACAACGCTTTCAAGTAAATCTATGGCAGCTCATC AACTACCAAGGGCATGGGCAAGCAGTGAAAGCTCGTCTAGCGCGGTAATGGCTTATGATGTGGTGATT CTTCAATAACCAAACTCAAAATTTCCAAGAGGTTTTTTCACAAAAACAGCATTTCTATCCGGCGTTTGGCGGTTAACAT GGTGTGATTATGGGATATGGAAAAATCGGATCAATTTATTT	1808	NGVDSINIANATITQHNAAGYSSMTFS TQSMDNSQNLNGLNSNGKLSVYGTTF TNEAKDGKFIAGQAVFENTNFNGG SYQFGSDSLNFSNNNQFNQFSGSEISAK NASFNANFNNSASFNNNSNATTSF VGDFTNANSNLQIAGNAVFGNSTNGS QNTANFNNTGSVNISGNATFDNVFN GPTNTSVKGQVTLNNITLKNLNAPLSF GDGTTTFNAHSHVINIAESITNGNPITLVS SSKEIYNNAFKNLWQLINYQGHGAS SEKLVSSAGNGVYDVVYSFNNQTYNF QEVFSQNSISIRRLGVNMVFDYVDM EK SDHLY

HP0294	1809	CTAAGCATAAATACATGCTTTTAGTTTTGGCCGTAATGGTGGCTCTCTATTGCGAAGGTTTAAAAAGATCTCAAAA TGTCAAAGAAATGCGCGACTACATTAAGAGCAATTTAGCGCTTACTATGTCAATATCAGCTACTCCAAAGAGCATGA TTTTAAAGTCGGGATAAATAATGAAAAAGAAATCAAAATGTCCACAGAAATAGCGCAAAATTTATGCCGTCCA ATCCACCCCTACGATTGTTTTATCCGATAAAACCGCAAAACCATCTATGAATGCCCGCTATATGCCCTCTACGCA ATTTTAGCCGTGTTAGAATTTATCGCGGATGGAAGTATCAAGACACAAAGACGATGAGGATCTCACTAAAAAAT AAAGGCTTACATCAAGTATAAAACCAACCTTTCTAAAGCAAGTCACTAGGAAGCCTAATGAAGAAATCTCAAAAG CCTGCTTTCTTTTGGCTCTCTTTGGTGGTCAATCCCTTAAATCGCACTCTATGCCCTAGCGTGGCGGATAGC CACTTTTATAGAAACGATTACGGCAGCGGAGTAAGGCAATTAATCTAAAGCTTTGGAGCGCAAAAGATACGCCAGCCTTTT TGCGTATTTATGGTGGTTTAAAGGCATTTAGGGCAGCCATCAAGCTTTTGGCGTAGAAGGGCTTATGCATGTG TTCCACAGCTCCTTGATTTTCACTATTTAGGGCAGCCATCAAGCTTTTGGCGTAGAAGGGCTTATGCATGTG CGAGAAATAGCGCGCAAGCTCTTTGAAAGCGCGGACACTTACCTTAAATCACTCTTAAATGACACCAACCTT TCTTTAAACGCGCTTAAACCTTTTATCAATCCAAACGATTAAAGCCATTCATGCCACTTTAAATCAAGCCCTTAAAT TTAGAACCCCTTAGAAATTTACAAGCAAAACGCCATTAAAAAGATGACGCTACCATTTTAGTGTAAAGGCGACTTAT AACGG	1810	NDKYMILLVFRNGCSYDERFKDLKN VKELRDYKEHFSAYYVNISSYKEHDFK VGDKNNEKEIKMSTEELAQIYAVQSTP TIVLSDKTGKTIYELPGYMPSTQFLAVL EFIGDGKYQDTKDDEDLTKKLKAYIKYK TNLSKSKSN
HP0294	1811	CTACAAAAGGCCATTTCCCAACAAAGATTCAAGCTAAATGAAGATTAGGCGAAAACCTATGAAAACGCCATTAT TGAAGCAAGATTGTAGGCAAGATAAAGGGGTTATATCGTGAGTCTCAAGCGGTGAGTATTTCTCTCCCGCT CGCACTCTCTTAAAGATGACGCAACCATATCGCAACCGCTTAAAGCGTGATCATTCGTGTGATAAGGAA AACCATCTATCAATATTTCTCGCAACGATTCTTTGAAGTCAATGACAAACGCAACTTGAAGTTCTAAGGAATGT TAGAAGCCACAGAGCGGTGTTAGGGTGTGCGCCAGATCAACCTTTTGGCACTTTGTAGAAAGCTAAGGGGAT TGAGGGCTTGGTCCATTATCTGAATCAGCCATAAGGGACAGTCACTCTGAAATACTACAAAGAGGGCGATG AAGTCTATGTCAAAAGCCATCGCTTATGATGAGAAAAAGACGCTTTCACTCTCCATAAAAGCGACTATAGAAGACC CATGGGAAGAGATTCAAGACAAAGCTAAACCCGATACGCCATTAAAGTAGTGAGTGAACCAACATTGAACATTATGGG GTGTTGTGGATATTGGTAATGATATTGAAGGCTTTTGCATGTTTCTGAATCTCTT	1812	YKKAISQQIKQAKIEELGENYENAIIEGK IVGNKGGYIVESQGVYFLSRSHSSL KNDANHIGKRVKACIIRV/DKENHSINIS RKRFEEVNDKRQLEVSKELEATEPVL GVVRQITPFGIFVEAKGIEGLVHYSEIS HKGPVNPKEYKEGDEVYVKAIDAE KRRLSLIKATIEDPWEI:IQDKLPGYAI KVVSNIHYGVFVDIGNDIEGFLHVSE IS
HP0294	1813	CGCTGAAGTGAGCGGGCGGTAGGAAGCTTTGGGCGCAAAAGGGCGGAAGGCCAGAGCGGAGGAGCATC ACTTCGCTGTGTTGTGGTGGGTGCTCTCATGGGCTACGAATAACCGCAATTACAACCTTAAATCAACAA AAACAAAAACGCTGCTTTAGATACGCTTTAGAAAGAAAGCGCAAGCGAATAAGCTTTTGTGGTGGAATAAT CGCTATAAAGCGGTGTTGAAGACAAATAAAGGAAGCAATTTGACTAAAGAAAGCAACCAACCAATGTTCCAGGCTTAG AGCAACGAGACACTTTGTTGTG	1814	AEVSGGGRKPWAQKGGGRARAGSIT SPVFGGGSVSHGATNIRNYNLKINKK QKRLALEALEEKAAQANKLFVVEKIAIK GVVEDNKRKHLTKEANQMFOALEQRD TLFV
HP0294	1815	AGGTGTTCAAGACAGCAAAAGACGCTTGGGGTTCATCTATGATCAGCGAGTTCATGAAAGCCTATACCGCA TTGCTAAAAAACAAGACCGATACGCTATTTATTGAGGTATCTCCCTCTAGGTATTGGCCAGCATTTTAACGACT GCCCTTTATGTCAATACCTGATTTGACGCTTTGAAAAAGCTTTTGGTGTCTTATTATACCAACTTGGATTGCAG GAGGCACGATCAGCGCATCAAGCAACAGTATCAACATTATCAAAACGTTAAAGCAATAAGAGCGTTGAAACC ATCAAGAGCTTATTTGAATAGCATCGACTTTTAAACCTTTGATCAATACCTCTATACTTAACTTATGGGATAGCTCTT CTGTTTATCATAGCAATGGTGGTGGTCTGCTGTCTAGCCCTAGCTAATTTTATGCGAGATGAAGAAACCCCAT TTATCGCTATGGATGCGAAACCAAGTGGAGCATATTTGCCACAAACGCCCAAGAGGCGAGTCAATGGAACGC GGATTTTGAACAAAGAAAGAGAGAAATGGGTAATAATATCGCGAATTTAACCTTTTAAAGCGTAAAGAACGCG GCATGCTTTAAACGGGATTTTATGAAAGAAAGAAAAATTTATGGAGGCAAGACACGAGCAAGTATTAGCTGTTA TGACATCACTAAAGAAATTGTATAGCAATTATAGGAAGTGAATGAGAAAGTCCCTCCAGAGCGATACAAATCTTTGTA TAACACTATACGCGCTGTTTACACATAGAGGGCAA	1816	VFKDSKKDACGFIYEIS:EFMKAYTALLK KQDRYVYLLRYLPSRYMWASILTALYV KYPDFDALKLLVSY'Q'TWIAGGTTR IKQTSINIKNVKSNSKSVETIKELINSIDS YNTFDQYLNLWDSSEVYHSKWVRPV LALANYFMADEEKPHFIAMDAETQVEH ILPQTPKRGSQWNADFDKEKREEWVN NIANLTLLKRKKNAHALNGDFDEKRIY GGKDTSKVISCYDITKELYSNYRKWNE KSLQERYKSLYNTITPV/LHIEGQ
HP0822	1817	ATGCTCTATGAAACCCCTTAAACACCCCTTGATGGGAAAGCTTACTTTTACCAAGATTGAGTTTTAAAAAATCCTAG ATTTTTTTAAACGATTTTAGAAACGACACGATTATCACAATAACCCCTTCACTTTCTATCGTATCTGCATGAGCCT TTAATATCTATTGATGATTGAGGGTTAATTATGATGATTGAGGGTTAATTATGATGATTGAGGGTTAATTATGATG ATTTGAGGGTTAATTATGATGATTGAGGG	1818	MLYENPLNTLDGKAYFYQDLSEFKILD FFKTILENDTIYHNNPFIFYRDLHEPLSI DDLRVNYDDLRVNYDDLRVNYDDLRV NYDDLRL

HP0822	1819	GAAGTTCAGACGATTAAACAATGTGAGTTATTATGGTAACGGGTGGATGCGGCTTAAAGCGTGGCTAGAGATGT TTATAACCTAAATCCAAATCAAGCAGAAATCGTAACCGCTATAACGACGCTTAAGACTTTGAGCGAAGAGATTTCTAA ACTCCGACCAATCAAGTCAATACAAAAGACATTTTACACTACCTACGATAAAACGCCAGCAGCAGGCAAT CCAACCTACCAATCAACCCAGAGCAGCAATCAATCTTAACCAAGCTTACGAGCGATGAGCAATAACCCCTTTAA AAGTGGCATGATCAGCTCTCAAAACAATAACGGCGCTTGAACGGCTTGGCGTCAAGTGGTTATAAGCAATTC TTTGGCAAGCAAAAGATGGGGTTAAGTATTACGGATTCTTGAATACAACCGGCTACATCAATCCAGCTT CTTAACTCTTCTGATATATGGACTTATGGCGTGGAGCGATTGTTAGTGAATATTATCAACGATAGCATCAC AAGAAAGAACCAACAGCTCTCGTGGTCTTTTGGAGGCATCCAACTAGCAGGACTACATGGCTTAATCTCAAT ACGTGAATTAACCGGTTCAATAACCTTACAGCGCAAGTCAATGCTACCAATTTCCAATCTTGTCAATCTCG GCTTGGAGACGAATCTCGCTACAGCTAGGAAAGACAGCGAATCTCCGCGCAACATGGCATTTGAATGGGTATT AAATGCCACCATTAACAGCAATTAATCTTTTCTAGGCACCTCAATGCAATACAGAAAGGCTCTATAGCGTGTAT CTCAATTATGTGTTCTGCTTACTGAGTGATTAAGCTCTCTTCTTAAGGGGTTAGAAAATCGCAACGCCAAGCTT TTATCGTTGGTGATAAATCTACAAAATAACGGCGGACAAACCCCTAACGCTAGCTCAAGACACGACTAA ACCCAGGGATCAAAA	1820	EVQTKNNVSYGNRVDAALSVDVY NLKSNQAEIVTAYNDAKTLSEEISKLP NQVNTKQIVTLTPYDKNAPAAQSNYQI NPEQQSNLNQALAAAMSNPFKVGMI SSQNNNGALNGLGVQVGYKQFFGESK RWGLRYGGFFDYNHGYKSSFFNSS DIWYGGGSDLLVNIINDSITRKNKLS VGLFGGQLAGTTWLNQVYNLTAFNN PYSKVNATNFQFLNGLRLTNLATAR KKDSEHSAQHGIELGIKIPITTTNYSFL GTQLQYRRLYSVYLYNYVFAY
HP0822	1821	GGATAAGGTGGCGAGACTTTGTATTATGGGGTGGGCTGGGAGAGCCTACCGAAGCGGCTCATTAGCGGA TATTATAGAAATCGCAAGGAAAGAAAGCTCTCTAATGCTGGCTTTGAACCCCTCAAAAACCTCCCTAAACCCAA AGAAAGAAATCCAATGCGCTTATTATGCGGCTTGTAGTGGCGATGAAAGGGGTTTTTCTCAATCAGCGCGA TTTTAGCTCAAAATGATTTTCTCAACAATGTCTTGCAAAAGAAATCTTGCAATCCAAAGGCTAAATCTTATT TTCCACGCACACCAACGAAAGTCTATGCTGAACGCCCTTAAGAGCTTGAATTTACAAAGCGTGTGGATA CCCCCAAGATGATTGTTGGAAATTAATGCGCTTTTGAACAACAACATAGAGAAAGGGCTTAAAGGCTGAA GAA	1822	DKVGETLYGAGAGGEPTASAVISDIIE IARKSSMLGFEPTQKLPKPEEQC AYYARLLVSDEKGVFSQISAILAQNDIS LNNVLQKEILHSNKAKILFSTHTTNEKS MLNALKELENLQSVLDTPKMIRLEN
HP0944	1823	AATACGCTAAATTTGAGCGCTTTAGCCCAAGACACGCTTTAGATCCAGTATTGGCAGAGAAGAGATTTTAA GAGTGATAGAAATTTAGGGCGCAGAAAGAAATAACCGCTTTAATGGCGAAGCGGGCTAGGGAACCTC CATCGCTGAAGCTTTGGCTTTAAATCGCTCAAAAAGAGTCCCGGAGTTTTGCAAGAATATGAAGTCTATTCTT GGATTTAGCCTTAATGGTGGCTGGGCAAAATACAGAGGGGATTTGAAAACCGCTTGAAGAAACCGCTCAAGAAA TCCAACAAAACGGCGTATCATTTATTCATTGATGAATCCACACCGCTTTAGGCAGAGGAGCAGTAAACGCTGGG AGCTTGGATCGCGCAATATATAAACCCTTTAAGCGGATGGAGCTTGAATGTTAGGAGCGCACCTTTGA AGAATACCGCAGCGTGTGAAAGACAAAGCTTTAAGCGCTTTTCACTCATAAAGTTGAAGAGCCTTCTAA AGAGCGGTGTTACTTGAATTTAAAGATGCTCCCTTTATGAAGAACACCAAGGCTGCTTATGATGAGAGCG TGTTAAGGCATGCGTGGATTTAAGAGTATTACGATGATGATAAATCTTCCCGGATGAAGCGATTGAATATTAG ATGAGTGGGATCGAGGAAATAATCAGCCCTAAAGGGCAAAATAAGCGCTTGAATGATGATGAAGAAACGCT CGCTCTAAAGCTTAAATCCCTAAATCGCTTGAAGCGCAAAAGCCCTTTAAGGAATTTGGAAGAAATCGCT TAAATAAGATTTTGGCCCAAGCAGAGCGATCAGTCTTGTAGCAATGCGATTAAATCCAGCATTGCGGCTTTC TGCAAAAATAAGCCTGTGGGAGCTTTTATTCGTGGGCTAGTGGGTGGGAAACAGAAATGGCTAAAGAA TTGGCCTTGAATTTGAATTT	1824	YAKNLSALQDNALDPVIGREELRVI EILGRKKNPILLIGEAGVGKTSIAEAL ALKIAQKEVPEFLQEYEVYSLDALMVA GAKYRGDFEKLKKTLEIKQNGRIILFI DEIHTLLGTSSNAGSLDAANILKPVLT DGSCLKLGATTFEYRSVFEKDKAFNR RFSVIKVEEPSKEACYLILKIAPLYEEH HQVRYDESVEFKACVDLTSDYMHDKFL PDKAIELDEVGSRKKISPKKKGKIGVD DVKETLALKKIPKMRLLSSDKKALLRNL EKSLKNKIFAQAEALSISNAIKIQHCGI SAKNKPVGSFLFVGPVGKTELAKEL ALNLLHFE
HP0944	1825	CAGCGGATAAATACGACTCCGGTTCGGGTGGCCAAAGCTTTCTAAGCCTATCAATAAGATGTGGTGAATACGAA GACGATGAGAGCCTTAATAGGAACGCTTGAAGTGTGAGCCGTTAGGCGCATTTAGGCGCATGTGTTTAA CGATGGCCTAAAGAAATAGGGGCTTAAGGTATTGATCAACAGCGGCTTAAAGTTATCCCTTAAAGACA TGGAANAAGAGGTTATGCGAGTTATCCCTTATATCAAAAGGTTGAATGAATAACATCAATGATAAAGT CGCATTAAGGGTAAAGCAAGCCCTTAAGGGGTTAAATGAGGGTTAAGCGTTGGGTGCTTATGCG TTATCTTAAAAAACGCTAAACCGCTTAATGATTTATTTAATACCCCTTACTTAAACCGCTCTCTTAAAGCTTT ATGGCTTTGTTCTTAAATAATCAATAAAGCTTTTAACTTTTAAATAAGGGTTTAAATTTATTTTGTTC AAACTTATTTTAAAGGGGTGGGGTATCCCATTAACCCCAACCTAAACCCCTAACCCCTAAAGAGTGC TTTTTAGAGATTATCGCTTGGTGAAAGCTCTTGTATTAATTTAAATGCGCTAGAGCGTTTATGATTTAC CCCATATGAGCTTGTGTAAGCTGCTAAATGCTTAAAGCATAAATAAGGAGCAACAGGATTTATGACACCTTTCA TTAGCCAAAGCGATAAGCTTGATGCGCAATGCCACGCTTAAACGCTCAATGCCGTATCAGCCCGCT	1826	ADKYDSGCGWPSFSKPINKDVVKYED DESLNRKRIEVLSRIGKAHLGHVFNDDG PKELGGLRYCINSAAALRFIPLKDEMEKE GYGEFIPYIKKGELKKYINDKKSH

HP0944	1827	TCAACACGCACAAGTATGATCCGCTGATTCCTTTAAAGGATTAGGGCTTACAGAAAGAACCGATGTCGAAG GGCAAGTGGTTATCCAGTGCCTCAAGAGAGGTTAAAGTTGCTGTTAAGGAGCTTTTAGAAGCAGGTGCAAGG CCATTGTGATTTGCTTGTGCAATCTCATAAACCGTGAAGCGAGCGGATCGTTAGAGATATAGCGTTAAAGAGA TTGAAAATTTGGTAAATAATTCCTGATTCGCTTCTGTGATTACTACCTCAAGAAAGAAAGCCACAGAAATGA ACACACCATCTTAGAAGCTTATGCGGCTGAGCCAGGCAAGCAACCTCTCTAAAGTCAGCAACCGATTCAAGAG CATGGCGCTAAATTTGATCTTCTGTGATGGCAACGCTAGTTGAAAGCTAAAGAACTCGCTAG GACTATTGTGAGCGGCCCTATTGGAGCGGTGATTGGATCTAAATTGCTAGCGCAACGCTTGGTTATGACAATATTG CATGCAGTGATATTGGTGGCAGGAG	1828	INTHKYDDPLPLKRIRGVTERTDVKGQ VIVPVRQEEVKVAVKELLEAGAKAIVIC LLQSHKNAESERIVRDIALKEIEKLGKNI PVFASVDYYPQRKESHRMNTTILEAYA AEPSTRQTLKSVSNRKFKEHGAKEFDLRV MATHGGTISWKAKELARTIVSGPIGGVI GSKLLGETLGYDNIACSDIGGT
HP0944	1829	ATTAGGCATTGATGTAAGACCGGCGAGTTTAAAGGCGCAGACATTCATTCTCAACCCAGCAATCCATGGAATA TCAAAGCGATTTTAAAGAAAGCAGGGTTAGGATGGATAGCGTGTTAAACGACTATTTTATTGAAAAGTTTAGACG ATTTTGGCGGTGGTGAATGGAATCTATGGAGTATTTTACAGAGCCTTATCCGGCCAGAGCGACCTTTCAAGTGGCT AACTGCCTAAAGACGCTTTAGTAGAAATTGAAGCGATAGCCATTAAGTAATTTTAAAGGGACTATCAGCATGAAA AAAGAGGTCGTGTCATAGCGGTGGGATTGTAGGGCTTCTTGTC	1830	LGIDVSTGEFGADIHSQTTQSMENIKA ILKEAGLGMDSVVKTTILLKSLDDFAV NGIYGSYFTEPYPARATFQVAKLPKDA LVEIEAIAIK
HP0944	1831	GGCTTTAGATACGCTTTAGAGAAAGCGCAAGCGAATAAGCTTTTGTGGTGAAAAATCGCTATAAAAGGCG TGGTTGAAGACAATAAAAGGAAGCATTTGACTAAAGAAAGCAACCAATGTTCCAGGCTTTAGAGCAACGAGACACT TTGTTTGTGTGCATGAACATGGACGAATACACCGAGTTAGCCTTTAGTAACCTTAAAAAATGCCCTTATTGTTGATGTG AGCGAGTTAAACGCTTATCTTTTGGCGGCTTTAGCTCTGTGGTGATGGAAGAGCGGCTTTCAGCATGTGGTG AAGATAAGACAGAGGAGTAAAAAATGGCAGACATCATGG	1832	ALEYALEEKAQANKLFVVEKIAIKGWE DNKRKHLTKEANQMFQALEQRDTLTV CMNMDEYTELAFSNLKKCLIVDVSELN AYLLAAFSSVWMEEAQFQHVVDKTEE
HP0944	1833	GAGGAAATTAGTCGTGATTTGCCAGGCTTTATACCCCTAACCCACGCTCTCGCTCGCTCAATT	1834	RKLWVYFARLYTPNPTLSLAC
HP0823	1835	ATTGTGCGTGTAGAAACGATAATTTGAACATTTAAGAGCGAGTTGGATTAACTTGCAAGCTTTGGCGAGAGA AAACGAGCTTTATCGCAAAATATTGCGGTGCCAATTCGTTTAAATCCAAAGAAATCCCAAAACAGAAAGCCC CTTTGAGCTTTACTCGCTTTAAACGCCAGATTTTACCGCAAGTATTGAAGAAAGAACGCAAGTTTATAGAACAT AGACATGGCTAAAGAGGCGCTAATAAGCCTTTTACCCCAAAACGATCGCAACTACCGCTTATTAATGAGG CGTGTGGCTTTCTAAATTTCAACCCCTTGAATTGCTGCTGCTAGTGGCTTAAAGTAAGGCTAAAGTTAGGAT CAACGATTTAAGTGGGTTTTTCCAGCGTTTAAAGCGTGTAGTGGCTTACCCAAAGAGATGAACCTTTGTTTT AACTTTAGAGGCGCTTAATACTCTTATGGCGAAACCTACGATAATTTAAAGAGTTAAACCTTAACCCCTTAAAT GAAGAAGAGTTGCTTTAAGGCGGTAGTGAGCGGAGGAGAGTATTAAACCTTATTATCGTGTAGAAAGACGCA CAGAAAGACCCCTTTTGTAGAAATTAAAGCGTTTTTCAAGAAAGAAAGGTGTTTTTATTTGCTGTAAAGCTAAACTTTA ATTAGCGGATAAATCTTGTA	1836	FVFRNDNFHFSELDNLQALAREN ELYRQNYCGCQFALKIKQKESQNRSPF ELYSPLKRQILPASIEERTQVFRDLMA KKDANKPFLAQKTIATYRLNNGGVWLS KNSNPLNCCILARSKSKAKVFINDLRW VFSQRLSVLVGYSQRDETFLTLEGLN TLMAKNYDNLKELNPLNPLNYEEELSLR ALVSGSESNPIVLEERTEKTLFVEIKS VFQEEKVFYLL
HP0823	1837	GCCTTTCCCTAGCGAAGACACTACACCCATGGCGGATCATTTAAGGACTAAGGGTGGGAGTTTGGCAGCAACCC AAGCGCCCAAGCGTTGCGGGTGGCTGGATTGTTGGCTTTGAAATACGCTTGGCTTTGAATGGTTGCACGCAAT TAGCCCTTA	1838	PFPSEDTTPMGDHLRTKGAEFGTTTK RPRRCGWLDLVALKYACALN3CTQLA
HP0823	1839	ATTAGACGAACTCTCCATGAGTGAAAAATCGCTATTTTACTCATTCAAGTGGCGAAGACACCACGGCGGAATTTT AAGGCATTTAGACATTGACTCTATTACAGAGATTCTAAGCAAAATCGTCAATTAACGGCACAGACAAAGCAATTTT TGCGGCGGTTTAGAGGAATTTTTCGATTTTTCAGTCTAACCAATACATCAATACCGGGTTTGGAAATACGCTAG AGAGCTTTTAAACAGGACTTTAGGAGCGAAGAAAGCCCAAAAGTATGAGCAAACTCACTAAAGCTTGCAAACGC AAAAAACTTCGCTTATTAGGCAAAATCAAGCCCAACCAACTCGCTGATTTCATCATTAACGAACACCGCTCAAAACC	1840	LDELSMSEKIALLIQVGEDTTGEILRHL DIDSITEISKQIVQLNGTDKQIGAAVLEE FFAIFQSNQYINTGGLEYARELITRLTG SEEAKVMKDLTKSLQTKQKNFAYLGKI KPQQLADFIINEHPQT

HP0823	1841	CGATCTAGACTATGCGATCGTCAAGCGGAAAGATTAAACCAAGCTTACCACAGCGGGACGCAAAAGAGAACG GACATGAACGAAGAGCAGATTAAAGCATTGCTGAAATTTTATCTAAAGATATTTGGTAGCGGAGGTTTGAA GATTTACCGATCATTCTACATGACGGCAAGTATGATCGAGGAAACACAGAAATCCAGGCGATGCTAAACCTCAGCGC TAAAGCCGTTTTCTTACGAGAGCGATCAAGGAATATACATAGACTTAAACCGGACGAGTTGTTAGTGAG AGTGCCACACAGCGCTAAACACACCGAGATCAACAAATTTAGCGCTTCATCCAATCAAGGACGCTTCAATAGCG AAAGCGATCACGCTATAGCGTTTTAGCGCTTAAAGCAATTAAGCAATTAAGCAATTAAGCAATTAAGCAATTA GCATCTACTCATTAACAAACATTGTTGCTAAATTTGAAATTTGATAAGGCTACGCTAATGTAACCGATAGTAA TTTAGCGTTGCTGATGTTAAACATGCCACGAAACCAACGCAAGGATAGAAATCTCAACCGCTGGAACAAAGAAAT TTCCAACGACATTAAAGCTATGAACATGAACAAATTTGTTAGATAACGCGGAGTTTCAACATCTCATCCA CGATCTGAACCTCCCTAAGGTGAGTTTAAACGCTTATTAAGCGATATTATGATCGCAGTTTTCGGAATTTAAGAAAT TACCAAGCAGCAGGAGCGCTGAAAGATTGAGCGAAATTTCTATAAACGAGTTCTGTTAGAGATGTTTGAAAA GAGC	1842	DLDYAIVKAKDKLPSTTTGGTQKRTDM NEEQIKSIAENFDPKKIFGSGGFEDLP LHDGQVIAGNHRIQGMNFTPKSRFSY ERAIRKEYYHIDLKPDDELLVRVPHKRLNN TEINNLAASSNQGRFNSESDHAIIVLS HYEAKLKELDKLDADSIYSLKNIVAKN LNFDKATHPNVTDNLALLMFNMPRTK TQGIENRWKKEFSNDIKSYEKVKKM FVDNAGSFHNLHDLNFKPKVSLNAYLS DIMDRSFANLKNYQSTSESLEKDLSEKF YKTSLEMEFEKS
HP0823	1843	GACACGCTCTATTTGAACCCATTCTTTGAGTGGTGAAAGCATCATCCAAAGGAGCGGAGTGCGATGGCATTAT CGTGCAATTTGGGGACAAACCCCTTTAAACTCGCTAAAGATTGGCTAAATGCAAGCCCCCATTTATTGGCAGCG CTTTTAAAGTGATTGATTTGACAGAGACAGGAAATTTCCCTCTTTTAAAGAGCTTGACATCAAGCAGCCCCA AAACGGCATGGCTAAGAGCGTTGATGAAGCTTATAGCATCGCTAATGTGATTGGTTCCCTATCATTTGCGCCCT AGTTATGTGCTAGCGGCCAACACATGCAATTTTAGAAACATTTAGGAAATTTGCGCCATTTATTGGAAGCGTTAC GCATGCTTTAGAGATTAGTCTTAAACCCGCTTCTCATTTAGATAAGTTTAAAGAAAGCGGTTGGAATTAGATGTGA TGCTATTTGCGATAAAAGAGGTTTATATGCGGCTTATACAGCACATTTAGAGAGCGGAAATCCATTCAGGCGGA TTGCGGCTGCTTATCCCTCCACTCAAGCCCTGAATTTAGATGAATGAGCGGCTGAGCGCAAAATCGCTC TGCAATTTGGCGTAGAGGCTGTTGAATCCAAATTTGCTGTCATCAAAATCGCTGATTGATTGAAGTCAATC CCAGAGCCAGCCGACCGCTGCTTTTAAAGCAAGGCTTAGCGCTTCCCTTAGCCAAAGTGGCGACTAGGTTATG GTGCTAGAAGACTTGAAGAGCGCTTGAAGTTTATGATAAAATAATCGTTGGATATCTAAAGCGGTTTATAAG CCTAAATGCCCATTTTGTGGCTTTAAAGAGCGGTTTCCCTTTTAAATAAATTTATGATCGGATTTGATTTTAG GGCTGAGATGAAAGCAGCGGAGTGTAGGCTTTAGGCTTTAGGCTTTGCAATTT	1844	DTLYFEPIHFECVKSIIQRERVVDGIIVHF GGQTPKLAKDLAKMQAPIGTPFKVIDI AEDREKSLFLKELDIKQPKNGMAKSV DEAYSIANVIGFPIVRPSYVVGQHMQ ILENIEELRHYLESVTHALEISPKNPLD KFLEKAVELDVDAICDKKEVYIAGILQHI EEAGIHSGDSACFIPSTLSPEILDEIERV SAKIALHLGVGLLNQFVAVHQNLSYLIE VNPASRTVPFELSKALGVPLAKVATRV MVLEDLKEALFYDKKNIVGYSGVYK PKMPHFVALKEAVFPFNKLYGSDILG PEMKSTGEVMGIARSLGLAF
HP0823	1845	GATATTTGCGCCACTCAAGTTAAATCATTTTAAACTCCCGCTTAGCCCTGAAGAAATGGAACCAACATCGTG CGCCCTTTAGAAATGGAGCTTTTAGGCTTGAAGGCGCAAAATCTTAAAGAGTGTTCAAAATATTTCTATTTAGATA TTACGATAGATTTGATGACAGCGTGATATTTATTTAGCGAGGAATTTGTCATAGAGCGCTTGAAGCGCTGATGA AAGATTTACCGTGCGGTTGAGGGGGCATGGCCCATTTAGATTGTTACCGCTATCAGATATCTTATGTTCACTATT GATGGCAATATCACTGAGATAGAAACACAGAGCTTTTAGATTGTTGATCCGCCCAATTAAGAAATGATAGCGGC GTAGCAGATGTCAATTCATTTGAGGCTTTAGCAGAGCGTTTGTGATCGTGGCGATTTAAGACAT	1846	DISPTQVKIILKLP GSSPEEMENNIVRPL EELGLKLGQKSLRSVSKYSISDITIDFD DSVDIYLARNIVNERLSSVMKDLVGV EGGMAPIVPLSDIFMTIDGNITEIEKR QLLDFVIRPQLRMISGVADVNSIGGFSR AFVVPDFND
HP0823	1847	CATGTTTGGCGGCGAATTTAGCGATTTTCCAGAGCGGCTGCTAGTGAAGATTAGACGATATTTAAAGCT CTATTTTGGGAAAGGAGGCTTTTCGCAAGATTTCGCAAACTCGCAAGGCTTTCTGGCTTTAATTTTCCCAATTT CGCCCTGAAATTTAGACATAACCGCGCTTTAAATGCTCTGTTTAGACACCTTTTAGGCAATAAAACAAAGT GAGCATCAATAATGAGACTTTTAGCTTAAATCCCTATTGCGGTGAAGAGGCGCAAAAGATTAGGTTGCGCAACA AGGGGAAACGGGCGAAGCAGTGGGCGATTGCTCTAGAGATCCATATTGAAGAAAGATGAATGTATAGCGG CGAGAAAGATGATATACCCAAATCTTTGATTTACCTTTAAACCGGCTCTTTTGGAGGAAATTAAGAAATCGCTAC TTGGCATAAACCTTAACCTAAGCATTCCTTACCCCTAACCAAGCGATGCAAAATTCGCGATTAAAGAAAGGAT CAAAACAGAAACCTTGGCATGTGGGGATTGTTGATTTGCGGCTCGTTGATTTGCGCTAAACCTGAAACGCTTTC TAATGAGTTGAAAGCGTTATTAGAAAA	1848	MFGGQNFSDFAARSRGPSEDLDDILSSI FGKGGFSQRFQNSQGFSGFNFSNFA PENLDITAAALNVSLDITLLGNKKQVSIN NETFSLKIPIGVEEGEKIRVRNKGKTGR TTRGDLLEIHEEDEMYRREKDDITQIF DLPLKTALFGGKIEIATWHKTLTLTIPPN TKAMQKRIKEKGIKRNKTSVGDLYL QARLIPKTETLSNELKALLE

HP0823	1849	CTAGACTATGCGATCGTCAAGCGGAAAGATTAAACCAAGCTTTACCACAGCGGACGCAAAAGAGAACGCGACAT GAACGAAGAGCAGATTAAAGCATTTGATCCTAAAGATATTTGGTAGCGGAGGTTTGAAGATTT ACCGATCATTCTACATGACGGGCAAGTATCGCAGGAACACAGAAATCCAAAGCATCTAACTTACGCTTAA GCCGTTTCTTACGAGAGCGGATCAAGGAATACATACATAGACTTAAACCGGACGAGTTGTAGTGAGAGTG CCACACAAGCGCTAAACAACACCGAGATCAACAATTTAGCGGCTTCAATCAAGGACGCTTCAATAGCGGAAAG CGATCAGCTATAGCGGTTTAAAGCCACTATGAAGCCCAAGTTAAAGAAATAGACCAAAATAGACGCTGATAGCAT CTAC	1850	LDYAVKAKDLKPSFTTGGTQKRTDMN EEQKSIENFDPKKIFGSGGFEDLPIL HDGQVIAGNHRIGQMLNFTPKSRFSYE RAIKEYYHIDLPDELLVRVPHKRLNNT EINNLAASSNQGRFNSESDHAIIVLSH YEAKLKELDQKLDADSIY
HP0823	1851	TTTGGAAATACGCTGATCCTAGCACTTCTAAAAAGAGAGCGGATTAAGGATTAATAAAAGGTTTCAAAAGACAGCAAAA AAGACGCTTGGGGTTTCATCTATGAGATCAGCGAGTTTCATGAAGCCTATACCGCATTTCTAAAAAAACAAAGACCGA TACGCTATTATTGAGGTATCTCCCTCTAGGTATTGGGCCAGCATTTTAAAGACTGCCCTTATGTCAAATACCCCT GATTTGACGCTTGAAGGCTTTGGTCTTATTATTACCAACTTGGATTGAGGAGGACGATCAGCGCATC AAGCAACCGAGTATCAACATTATCAAAACGTTAAAGCAATAGAGCGTTGAACCATCAAGAGCTTATATTGAAT AGCATCGACTCTTATAACACCTTTGATCAATACCTCTATACTTATGGGATAGCTCTTCTGTATTATCATAGCAATGGG TGCGTCTGTCTTAGCCCTAGCTAATTATTTCATGGCAGATGAAGAGAAACCCCATTTTATCGCTATGGATGCCGAAA CCCAAGTGGAGCATATTTGCCACAAACGCCCAAGAGGAGGAGTCAATGAACCGGATTTGACAAAGAAAAAGA GAAGATGGGTAATATATCGGAAATTAACCTTTTAAAGCGTAAAGAAACGCGCATGCTTTAAACGGGATTTT GATGAAAAAGAAAAATTTATGGAGGCAAGACACGAGCAAGTATTAGCTGTATGACATCACTAAAGAAATTTGAT AGCAATTATAGGAATGGAATGAGAGTCCCTCCAGAGCGATACAAATCTTTGTATAACACTATCAGCGCTGTTTTA CACATAGAGGGCAAGAGATGATTTGAAGATGATTTGATCTAGATGATTAAGATTGCCAAGCATCAAAACAAC GCGGGGAATACAGTCAAGCGATCTTTTACGCACATTAGCGATATTAAGGCTTATTAAGGGAGTCAATGG GGGTTATTGGTTAGGGACTATCGGTAAGAGAGTCCCAAGCTCGCTCAAGCTTTCGGGCAAGGTTGTTGTTAT ATCCCTAAAGATAAAAGAGAGTATGAGCGCTTGAAGTTTAAAGATCTGCTCGCAACAGCGATATATCAGCA TTATGCTCTCTAATGAAAGCAGCGGATTTAATCGCTGTAAGAAATGCAAGCTTAAAGATGGGCGATTT TAATCAATGTGGGCGTGGGCGATTGTGAATGAAAGGACTTGGCTGAATTTAGAACTAAAGATTTGATTAC GCGAGCGATGTGTTGTGAAGAGCGCTTTGAAAGAGATCATGCGTTTGAACCCCAAGATCCAAATAAATTGCTT TTAACCCCCCATATCGCATGGCGTATAGCGACAGCTTGAAACCTTAGTAGAAAAACCAAGAAAAATATCCAGGA TT	1852	LEYADPSTSKRADKGLKKVFKDSKDD ACGFIYEISEFMKAYTALLKKQDRYVYL LRYLPSRYWASILTALVVKYPDFDALK KLLVSYYYQTWAGGTITRIKQTSINIKN VKSNSVETIKELINSIDSYNTFDQYLY NLWDSSVYHSHKWRPVLALANYFMA DEEKPHFIAMDAETQVEHILPQTPIRG SQWNADFDEKREEWVNNIANLTLLK RKNAHALNGDFDEKFKIYGGKDTSK VISCYDITKELYSNYRKNWNEKSLQERY KSLYNTTTPVLHIEGQEDDFEDFDLE
HP0947	1853	GCGGGGAATACAGTCAAGCGATCTTTTACGCACATTAGCGATATTAAGGCTTATTAAGGGAGTCAATGG GGGTTATTGGTTAGGGACTATCGGTAAGAGAGTCCCAAGCTCGCTCAAGCTTTCGGGCAAGGTTGTTGTTAT ATCCCTAAAGATAAAAGAGAGTATGAGCGCTTGAAGTTTAAAGATCTGCTCGCAACAGCGATATATCAGCA TTATGCTCTCTAATGAAAGCAGCGGATTTAATCGCTGTAAGAAATGCAAGCTTAAAGATGGGCGATTT TAATCAATGTGGGCGTGGGCGATTGTGAATGAAAGGACTTGGCTGAATTTAGAACTAAAGATTTGATTAC GCGAGCGATGTGTTGTGAAGAGCGCTTTGAAAGAGATCATGCGTTTGAACCCCAAGATCCAAATAAATTGCTT TTAACCCCCCATATCGCATGGCGTATAGCGACAGCTTGAAACCTTAGTAGAAAAACCAAGAAAAATATCCAGGA TT	1854	GEYSQSDLFTHISDIKMGILKGSQWGV GLGTIGKRVAKLAQAFGAKVWVYSPKD KKEEYERLSKOLLATSDIISIHAFLNES TRDLIALKELQSLKDGAILNVGRGGIVN EKDLAEILETKDLYYASDVFKPEFEKD HAFNPKIQNKLLTPHIAWAYSDSLKT LVEKTENIQD
HP0947	1855	CTTACATGAGGACCGATAGCTTGAATATCGCTAAAGAGGCTTTAGAAAGCGGAGGAATAAGATTTTAAAGACTATG GCAAAGACTATTTACCCCTAAAGCCAAAGTCTATTCCAGCAAGATAAAAGCGCCCAAGAGCCCATGAAGCGATC AGGCCACTTCTATTATTATGAGCCCAAGCTTTAAAGACTACCTTAAGCCTGAAGAAATTAAGGCTCTATACCTTAA TTACAAACGCTTTTAGCTTCTCAATGCAAGACGCTCTTTTGAAGCCCAAGCGTGTGTTGCTTGGCAAAAAG GCGAGTTTAAAGCGAGTGGAGAAAGCTCTCTTTGATGGCTATTATAAATTTAGGCAATGACGATAAGGACAAAT TGCTCCCAATTTGAAGAAATGACCCCATTAATTAAGAAACTAGAGAGCAACGCCCATGTTACAGAACCTCCAG CAGGCTATTCTGAAGCGAGCTTGAATTAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTT GAGCAAGGGGAGGTTTGGCAATCAGTTTATGCCAATATCAAGGAATGCGAAGTATCTTGCAGTGGTGGCT TGTTTTGAAGATGATAATACCGCATGTGAACGACAGATGATCCTTTGAATGATATAGAACTATTGAATGGAGT TGATTTAGCGGATTTGCCGCTTTAGACAAAGGATCGATCGCTTGAAGAAAGCTTAAAGAGCTCAAAAGACGCTA AAATCTTTTAGAATGCGCTTTGAGTTTAAAGCGCATTTAGAAAGATTAAGCGGCGGAAACCTTTCCCTTTGAATAC AAGCGAGGCTTTT	1856	YMRTDSLNIKEALEE/IRNKILKDYGK DYLPPKAKVYSSKNKNAQEAHEAIRPT SIILEPNALKDYLKPEELR/TLTYKRFL ASQMQDALFESQSVV/ACEKGEFKAS GRKLLFDGYYKILGNDKDKLLPNLKE NDPIKLEKLESHVTEPPARYSEASLI KVLESLGIGRPSTYA
HP0947	1857	GAGCAAGGGGAGGTTTGGCAATCAGTTTATGCCAATATCAAGGAATGCGAAGTATCTTGCAGTGGTGGCT TGTTTTGAAGATGATAATACCGCATGTGAACGACAGATGATCCTTTGAATGATATAGAACTATTGAATGGAGT TGATTTAGCGGATTTGCCGCTTTAGACAAAGGATCGATCGCTTGAAGAAAGCTTAAAGAGCTCAAAAGACGCTA AAATCTTTTAGAATGCGCTTTGAGTTTAAAGCGCATTTAGAAAGATTAAGCGGCGGAAACCTTTCCCTTTGAATAC AAGCGAGGCTTTT	1858	SKGEGLGNGQFLANIKCE/DEVILQVWRCF EDDNITHVNDKIDPLNDIETIELELADI AALDKRIDRLQKALKSSKDAKNLLECAL SLKTHLEELKPAKTFPLNTSEAF
HP0947	1859	CGAAGTCGCTTCAAAAGATAGCTCCATGCTATAAGAAATCCATAAGCGGAGGAAATTTAAGCAAAACACAAAAC AAACCAAGAGATCCACAAATCATAACGAACCTTCAAGCCCAACGAAAGCGGCTACAAGAAATGAAGCGTGTCTGA TTGTACAAATTTAGACAAAGGCTATTATTGATAGAAACCGAGCTTGGCATGCGTTTAAAGCGCATGGGAGTTTGT TGAAAAAATCCAAAAACCCCTAAAAACAAATTAACACCCCTTAAACCAAGCATTCCTTAAACCTTAAAGAAAGCGCT TGCGCTTGAATTAAGGGGCAACGCGAGGAAAGCGCTGGATTTACTAGACG	1860	EVASKDTSMHKEIHK/SEILSKHKTN QEIPQJTNFQANEKAR/YKNESVLJVQIL DKGYWIEIETELGMRLKAHGSLLKKIQK PPKNKFKPPKTTIPKPEASRLDLRG QRSEALDILD

HP0947	1861	AATTCATTGCTCTATTATCAGCCTAAAAACGCTATCGTTTGGTGGTAGCGGATGTCAATCCCAAAAGGTTTTTG AATTGAGTAAAGCATTTTGAATCCTTAAAAACCTTGATGAAAAAGCTATCCCAACCCCTTACATGAAAGAGCCTA AGCAAGATGGAGCCAGACGCGAGTCGTGCATAAAGATGGGTCCATTAGAATGGTGCCCTTGGGTATAAAGT GCCTGCTTCAAGCATAAAGATCAAGTCGCTTAGACGCACTAAGTAGGCTTTAGCGGAAGCAAAAGCTCGTGGT TGCAAAGCGAATTAGTGGATAAAACGCTTGCTTCTCAAGCTTCTCGCAACATGCAATTACAAGATGAAAGC GTGTTTTTATTGCTGCGGGGTAATCTAATGTCAAGCCGAAGCCTTACAAAAAGAAATCGTAGCGCTTTTAGAA AAGCTGAAAAAGGCGAAATCACTCAAGCGGAATTAGACAAGCTCAAAATCAATCAAAAAGCTGACTTATTCTAAT TTAGAAAGTTCTAGCGATGTTGCGGGCTTTTGGGACTATTTAGTGCAAAACGATATTCAAGGCTTGACGGATTAC CAGCGACAATTTTGGATTAAAGTGAGCGATTGGTGGTGGCCAAATGATATTTAAAGACACCCCAATCAACC ACCGTGTTTTGAACCTTAAAGAGCCTTAAACATGCAATTTCAATCATCTAGCGCTTATTACGCTTTTAAAAA AGATTGAGCGTTGATGAGCGCTTATGAAACCTTGATCAAGCGCCAAATTTTTCAGGGCATGGACGCGATGCGTGC CTGTTGGCACGACAGGAGATCCGCCACGCTCACCAAGAGCACATCGCTTGCATTGAAATCGCCATAGAAAC TTGCAAAACACTAAACGCCCTCAAAATTCGCGCATGAAAGTGTAGCCGCGTGGCAGTAACGCCACGAGCGGAG TCCCTTTCTTAGCAAG	1862	FHSLYYQPKNAIVLVGDVNSQKVFEL SKKHIFESLKNLDEKAIPTPYMKEPKQD GARTAVVHKDGVHLEWVALGYKVPAF KHKDQVALDALSRLLGEGKSSWLQSE LVDKKRLASQAFSHNMQLQDESFLFI AGGNPNVKAELQKENVALLEKLKKEI TQAECLKINQKADFISNLESSSDVAG LFADYLVQNDIQGLTDYQRQFLDLKVS DLVRVANEYFKDTQSTTVFLKP
HP0947	1863	TTCTCACATTTGAATATGAGACTGAAACAGACACTATGCGCATGTGGATTGCCAGGACACGCTGACTATGTAAAAA ACATGATCACCGGTGCGGCGCAATGGACGGAGCGATTTGGTGTCTGCAAGCTGATGCCCTATGCCCTCAAC TAGGGAGGATATCTATTGTCTCGTCAAGTAGGCGTCCCTCACATCGTTGTTTCTTAAACAACAAGACATGGTAGA TGACCAAGAAATTTAGAACTTTAGAAATGGAAGTGGCGGAATTTGTGAGCGCGTATGAATTTCTGCGCATGACA CTCCTATCGTAGCGGTTGAGCTTTAAGAGCTTTAGAAAGCAAGGCTGGAATGTGGTGAATGGGTGAAAGAA GTGCTTAAACTTATGGCTGAAGTGATGCTATATCCCTACTCAGAAAGAGACACTGAAAGAACTTTCTTGATGCCG GTTGAAGATGTGTTCTATTGCGGGTAGAGGAGCTGTGTTACAGGTAGGATTGAAAGAGCGGTGTTGAAAGTAG GCGATGAAGTGGAAATCGTTGGTATCAGACCTACAAAAAACGACTGTAAACCGGTGAGAAATGTTTAGGAAAGAG TTGGAAAGGTGAAGCGCGGATAATGCGCGTGTCTTTGAGAG	1864	SHIETENRHYAHVDCPGHADYVKN MITGAQMMDGAILVSAADGPMPTQR EHILLSRQVGVPHIVFLNKQDMVDDQ ELLELVEMEVRILLSAYEFPGDDTPIVA GSALRALEEAAGKAGNVGEWGEKVLKLM AEVDAYIPTPERDTEKTFMPVEDVFSI AGRGTVWTGRIERGWWKVGDEVEIVGI RPTQKTTVTGVEMFRKELEKGEAGDN VGVLLR
HP0947	1865	GGATCAAGTGAGTGGCTGTGCACACGATTGAATTGAGCTCTGATGATGTTTGAAGCCATTAAAGATCAGGTGA GAGAAATTTCTAGCGCTTTAAGGAGCGTGTCTGAAGAGTGAAGCGGATTGGCTAAGACATTTGTGCAAAATGGC GTGGTGCTTACCGCGGTGGGCTTTGATTAAAGCTTAGACAGTATTGAGCGATATGGTTAACTCCCTGTGTA TGCGGCGATGAGCTTTATTGGCGGTGGCCAAAGGACAGAGAGGAGGATTTGGAATTTACTCAGCCGT GTGGGTTTATGTAATATGATGCGTTTATTAAATTCCTTTGCTTTAGGATTTTCTATTTTTATTATTTTA GATTTAAGGGTAGTTCTTATATCAGCGACAGGATTAAATGCTTGTGAACGCTAAAAACAGCTTATTAGAC AACGTTCAAGCGTATTTTCAAGCCCAAAACATTAAGGAATTTCAAAAGAACGCTTGTATTAGAAGCTTTAAAC TAGAAACCGCGATTGAAGAGCGTTTGAATAGTATTATCTTTAGAAATCCAAATGACTTACACCCCACTTT CATGACTTCATTATCAGTTTAGAAGACACGACAGCTTCTCTCAACCTATTGTAATTTAGAAGAAATAAGATT TATGGCCTTGTCTCACAACCAAGCCATAGGCTTGGCGTGTAGAAAGGCGCTTGAACGGTTTGAACCGC TCACAAGCGGTGCGCTTATAGCGTGTATAGGCCAAATCAAGCTTTAGGCTTTATAGGACTAATTTCAAGCAAG AATTAGTCGTGGATTTCATTGTCCCAAGCGCTGAAATCAACATAGCGGATCAAGTGTCTAACGAGCGGGCTAGACCG GATTTTGGAGCGGGGTGTTGTGGCGGAAGTTTCAAGCATTGAAGA	1866	DQVSGLLHTIELSSDDVFEAIKDQVREI SSALRSVLEEVKPDLAQDIVQNGWLT GGGALIKGLDKYLSDMVKLPVYVGDPEP LLAVAKGTGEAIQDLDLLSRVGFSE

[illegible]

HP1114	1871	CATTATCGTGCAATTTGGGGGACAAACCCCTTTAAACTCGCTAAAGATTGGCTAAATGCAAGCCGCCATTATTGG CAGCGCTTTTAAAGTGATTGATATTGCAGAGACAGGAAATTTCCCTCTTTTAAAGAGCTTGACATCAAGCA GCCAAACAGGCGATGGCTAAGAGCGTTGATGAAGCTTATAGCATCGCTAATGTGATTGGTTCCCTATCATTTGTC GCCCTAGTTATGTCTAGCGGCGCAACACATGCAAAATTTAGAAACATTGAGGAAATTCGCGCAATTTTGGAAAGC GTTACGCATGCTTTAGAGATTAGTCTTAAACCCGCTTCTCATTTGATAAGTTTAAAGAAAGCGGTGGAATTAGAT GTGGATGCTATTTGCGATAAAAGAGGTTTATATTGCCGCAATTTACAGCACATTTGAAGAGCCGGAATCCATTCA GGCGATTGGCGTGCTTTATCCCTCCACTCTAAGCCCTGAAATTTAGATGAAATTTAGCGGGTGAGCGCAAAAT CGCTCTGCAATTTGGCGTAGTAGGCTGTTGAATATCCAAATTTGCTGTGCATCAAAATTCGCTGATTTGATTGAAGT CAATCCCAGAGCCAGCGAACGTCCTTTTAAAGCAAGGCTTTAGCGGTTCCCTTAGCCAAAGTGGCGACTAGG GTTATGGTGCTAGAGACTTGAAGAGCGCTTGAAGTTTATGATAAAAGAAATATCGTTGGATATCTAAAGCGCTT ATAAGCCTAAATGCCCATTTTGGCTTTAAAGAGCGGTTTCCCTTTAAATAAACCTTTATGGATCGGATTGAT TTTAGGGCCTGAGATGAAGACCGCGGAAGTGATGGGATTGCTAGATCTTTAGGGCTTGCAATTTTCAAGGCTC AAAGCGCTTGCTTTAACCCCATTAAGAAACAAAGGGCTTATTTTCTATTAAAGATAAGGATAAAGAAAGCAT GCGTTTAAATGAAG	1872	IIVHFGGQTPLKLAKDLAKMQAPIIGTPE KVIDAEDREKFSFLKELDIKQPKNGM AKSVDEAYSIANVIGFPIVRPSYVLGG QHMQILENIEELRHYLESVTHALEISPK INPLLDKFLKAVELDVDAICDKKEVYIA GILQHIEEAGIHSGDSACFIPSTLSPEIL DEIERVSAKIALHLGVVGLLNQIFAVHQ NSLYLIEVNPRASRTVPFLSKALGVPLA KVATRMVLEDLKEALKFYDKKNIVGY SKGVYKPKMPHFVALKEAVFPFNKLYG SDLILGPEMKSTGEVMGIAARSLGLAFF KAQTACFNPIKNKGLIFVSIKDKDEEA CVLMKRLVQLGFELCATEGTHKALEKA GVKSLKVLKISEGRPNMDLMMNGEIS MAINTSDHKSQDDAKLIRASVLKNHVS YFTTLSTIEVLLALEESKEDELLALQD YLK
HP0481	1873	TGAAGAAATTCGCGCATGTTATGCTTGCAAACGCTATTCTAAAGCCTATTGCAACCATTTATTAGGGCTAAAGAACT CACTTACGCTCGTTGGCCAGCTTGCACAATTTGCATTTTATTAGAGCTGGTGAAGACGCCAGAAACGCCCATTTT AGAAAGCGGTTTTGAGTTTAAAGAGAAATTTTGGAGAAATACAACTCCGCTCTCATTTGAATGATGGAATGCAA AAATACTAAAGCGTTTTTACCATCAATAAAGTTTTCTTAAATAAGGCTTAGTTTTTAAATTTTGAATTAACAA AACCTATCTTGATAAATCTCAGGTGGTGCTTTTAAAGCGCTATGGAACCAAAATAACTTTCCGGGTGGTTTC TAATCACCTCTTCGCACAACTCGCTTGGCTTGGCTGCAATCTAAATATCGTTTGGCGTTATCGGTGATTGAG AGCGGATACTCGGATAATAGTGGCTGTATAATGCGAATAATCGTCAATTAATAATCAATGAATACCGGCTGAATATCTA TATTATAACGGCGGACAAATAGAACGCGATCGTGGTGCGTAGCGTCTATCAAGAAATTTCAACCAACCCCA TCCTTAGGCACGACATTTGATCCACTAAATCCCCACCAGACCATTGCTTGATTATACATTTAATGAGTCTTCA TCGCCCTATTTTATGACAAACGCAACCCCAACGCTCTCGCTACTCATATCATGTGATTGATAGGGGCAAT TAGTCAACGCGC	1874	EENCACYACKRYSKAYLHHLFRAKELT YARLASLHNLHFYLELVKNARNAILEKR FLSKKEFLEKYNRSRSH
HP0481	1875	ATGGCGAAAGCTATGTAGCAACGGGCAATATTATGACACGCTCGTGCAATTCAGATACGGCACCAAGAGTTGAA CCGCGCTTAGCGACAAGCTGGACATATCCCCAGATGGCTGTATATACCTTCAATACGCAAGGGTTATTTC CACCAAACGAAGTATGGAATAAAAGTAGAGTTAGCGCTAAGATGTGCTGTTTTGTTTGAACGCCAGATGGAT AAAGCTAAACGATATTAGCCCCGGGGCTAAAGCTATAAGTATGGGAAGCATGGCATGTCTCATATTATTA GAGCATTAAGCTTTAGATGACTATACCATTAAGATTACACTTAATGGCCAGAGCCCGTTTTAGCGAATTTGGG CATGGACTTTTGAAGCATTTGAGTAAGGATTACGCTGATTACCTGCTCAAAATAATAAAAGACGAGTTGGCTAA AAACCTATTGGGACAGGCGCTTTCAAAATCTTTTGTGGAATAAAGATGAAAAATCATCTTTAAAAAATCAAGAT TATTGGGGCTAAAGCGTATTGGATAAGGTGGTGGTGGCGCACCATTCCTAATCTCCACTCGCGCTTAGCGTT GCGCACCGGCGAAATCATGCTCATGACTGGGCTAATCTCAATGAAGTGGAGCAATAGAAAAAGTCCCTAATATCG TGGTGGACAAAGTGCTGGTTTGTGGCGAGTTGGCTTCTGTTGAACACGCAAAAAAGTATTTTGACAACCCCTTG GTGCGTTTGGCTATCAATCATGCGATCAATGCAGATGATTACATCAAGTGTCTTATGAAGGCTTTGCTCAAAAAATG GTCAATCCTTTCCCGCCACCATATGGGTTATAACTACAATATCAAAACCTATGAATACGATTTGAAAAAGGCTAAG GAGTTATTGAACAAACCGCGCTATCTTAAACGCTTA	1876	GESYVATGNIYDITLVQFRYGTTEVEPA LATSWDISPDGLVYTFHLRKGVYFHQT KYWNKKVEFSKDVLFSEFERQMDKAK RYYSPGAKSYKYWEGMGMSHIKISIEA LDDYTRFTNLNGPEAPFLANLGMDFLSI LSKDYADYLAQNNKKDELAKKPIGTGP FKFFLWNKDEKILLKNQDYWGPKEYL DKVVVRTIPNSSTRALALRTGEIMLT GPNLNEVEGLEKVPNVVDKSAGLLAS WLSLNTQKKYFDNPLVRLAINHAINAD DYIKVL YEGFAQKMNVPFPPTIWGYNY NIKPYEYDLKKAKELLKQAGYPNGF

HP0481	1877	CGTGATGAGCGAATGCGACTTCCACTTGCTCATGGCTGAAAGCTTACGGATCCATTACGCTAAGACTTTAGACATTT GGCGAAACAAATTTCAACCAACAATCTAGACCAAGTGAAGAGACTCAGCTATGACGAACGCTTTATCCGCATGTGGGAT CTGTATTTAAGGACTTGGCATCGGCTTTAGGTGGGAGCGGATTTATCCAAATGCTTTTAAACCAACAGCGT GGATAACACATTTCCCTTAACCAAGAATACATCTACCAATAATTTAGATTTTACGCCCTTTTTCAGGCTAACTTCT GGCAAACTCTCCACATACAAACTCTGTGATGGGAAAGCAAACTCAATGGTGTCTTTCTACAATCCCATGATTTT AGCATCACATCTCTTTGACTTCTAGCCACTCTTCCCAACCACTGTCTTAGAAAGCAATACACTAAATATTAATAG AGCTGTCCGCAAACTGATCTAAAGACAAACAATTTTATACCTAAATAATCATCAATAGAAACAATATCTTT TTTAAACATGTAGCGGTAATCGCTCACATTTTGCAAGCGCTATCGGCTCGGTAGCGATTTAGGGTGGTTTCTAA CATTTCTTTAATGCTTTACGCAAGCTGTAAAGCGCTTTGACTGGAGCTATAAGTTAAGCCTATTTCCATTTTAATA CGCCTTCCCACTTTACGACGGCTCCAATTCCTGATGGTTTCCGGCTAATCTGAATAGGCACGGACAAAGAGC GTTGTCAAAGGCTCTGATCGTGGTGGCGCTTAACCCGATTTCCACCACCGTGCCCTCCACTTCAACCGCACGATCC AATCCCTTGAGAAACGAATTGCTAATAATAAATG	1878	VMSECDFHLLMAESLRIHYAKTLDWR NNFNHNLQVQKRLSYDIERFIRMWDLY LRTCASAFRVGSADLFQLLLTNSVDNT FPLTKEYIYQ
HP0481	1879	CCGTAAAAATCGCGAGAAATGCAAGTGCCCTATATTGGCTCTTCCATTACAGCCAGAGCATATTTCTTATAACA TGAAATGGGGTGGTTTCTGGTTCAACATGATGCTTTTCTGGTTAAATCTTCGCATTACCGCTATATCCACCA TATCCATTGCCCGTCAAAATTCATTGTAGAAGATTAGAAATAACAATACTGAGGGAATAATACGCTATTTCTAAG GGCTTTGATCCCATGTTAGATTGAACACCCGCAAAAGCCTTTTGACACACACCTTTTAAATCGCTATGGTA GGACGCTATTCTAATGAATAAATCAAGCGTTTAAATCAAGCGGTGCTTTAAGCAATAACAAACAAGATATTGTAT TATTGCTCAAAGGCAAGGCGCTGATGAGAAATAAATCAAACTTTAGCCCAAACTAGCGGTAAAGCGGAGTTT GGTTTGTCAATTCATGAATTGTTAGAGATCTTAAAACTTGACCCCTTTATGTGCTATAGCCCTTAAAGCGGAGTT GAAGCGATTGCGTGTAGAGGCCATTAGCGTGGGATTGCTGCTTATCGCTAATAGCCCTTAAAGCGGACCA GGCAATTTGCGGTAGATGAACGATCGCTATTGAACCTAATAACGCTAAAGATTGAGCGCTAAATAGATTGTTGGT TAGAAACAAGCTTGAAAGAGAAAGGATGCAAAACGAATACGCTAAAGCGCTTAAATACACTTTAGAAATTCAG TCATTCAAATTGAAAAAGTTTATGAAGAAAGCGATCAGAGATTTTAAATAACCCCTATCTTTAAACCTTATCATA ATGAAGGATAAAAAATGCAAGAAAGTCCATGATTATGGGATTAATTTTGAGCAATAACGAATTTAAGATAGAAAA GGCTTGGTTAAGTCTGTATGTTAAACCCCTCGCTTTAGAAATCGTTCAAAGCGTGCGGATAAGGGCTATAG AGGACCTTTG	1880	VKIAREMQVPYIGSFHLQPEHISYNMKL GWFSWFNMMLFSWFKSSHRYIHHI CPSKFIVEELEKYNYGCKKYAISNGFD PMFRFEHPQKSLFDTTIFKIAMVGRYS NEKNQSVLIKAVALSQYKQDIVLLKKG GPDEKKIKLLAQKLVKAIEFGFVNSNE LLEILKTCTLYVHAANVESEAIACLEAIS VGVPVIANSPLSATRQFALDERSLFEP NNAKDLAKIDWWLENKLERERMQNE YAKSALNYTLENSVIQIEKVYEEAIRDF KNPHLFTLS
HP0481	1881	TAGAACCCGATCATTTGACTGGCATTGCAATTTGAAATATTGAAAGCTAAACTCAAGGTTCTAACATTGATGCC TAAACTTCGCTCGCTATCCTCCCTTTAAATTCAAAGAACACCCCATTTATTCAAAACTCGCAAGCGCAAAAATCTTT TTTGACAAAGTGAAGGTTTATAGCGGTTTAAATAATCCCTTCTAACGCTCTTTTAAAGGAGCGTTTATTATAG ACGCGCTTTAGCCCTTTTATGAGCAATTTTAAATAAAGAAATTTAAATGGCAAGATTATAGAGAAACCGC CCTTAAAGGCTGAACGCTTTTAAATTTGCTCGCATAAATGGAAGATTTAGGATAAAGCAAGGCGTTTGTGGG TAGATGACAGCAAGCCACGAACATTGATGCCACCTTGAAGCCCTTAAACCTTTAAACCAAAATCCATTGA TTTTAGGGGGCGATATTAAAGGGGTCAATTTAACCCCTTTTGAAGAGTTTAAACTATAAATAAGTCTTTATGC CATAGGTTCAAGCGCTTTTATCATCCAGCTTAGCGTTAGAAATTAATGTTCTGTGAGGTTTGTGGAGTTAGAA AAAGCGGTTCAAGAAATTAAGCGGTTTATCGCAAAATGAATCGCTTGTCTTACCTAGTGCAGCCAGTTTGGAT CAATTTCTTCTGATAAAGAAAGGGGTGAATAATTAAGCGTTTGTAAAGGATTAAAGCGTTTGAACCATTTGT CTAATTGTGAAATTTTGAATAATCTCGTTCCGTTCTGATTCGTTTGAACCTTCCATAGAAACATTGAAGCTATAAAA CTTAGCGGTTTATGAAGTGTTTTAAATTCGAATTTAAGGGGCGTTGGTAGGTTTCTAAAAGCTCTTTTAAACGCTT GTATCTTTAGTGGTCATAATCACCTATAATCCCAAGGCAAGGGTAAATAATGGTGGTTTTTTTGAATCAGATGGC AT	1882	EADHLTWHCNFENYLNAKLVLTMPK TSLAILPLKFKEHPIQNSQAQKIFFDKS EEVLERLKIPSNALFFKGAFLLDAALAL LVYEQFLKIKNLKWQDYRENALKRLNA FKIGSHKMEEFDRDKQGRLLWDDSKAT NIDATLOALKTFKNQKIHILGGDIKGVN LTPLFEFKNYKISLYAIGSSAFIQALAL EFNVSCQVCLELEKAVCEIKSVLSQNEI ALLSPSAASLDQFSSYKIERGEKFAFV LKD

HP0481	1883	CCTACGCTTATAACGCTGGCGCTGGGTTTTAAGGAGGTGGTTAGAAAGTTCCAAACGATTAAAGAAAAAATCATT TTGAGCCATGGCTTAGCATGGAGCTTATGCCCTATAGCGAGACTCGCATGTATGGCTTAGGTCATGCTCAATTTAC TTGATTTATCAAGAAATTTTGGGAATTCATCCCTATTGATGGATTTTAGAACAACTCTTAACCTCAAGGACAAAC CATGATTAAAAATGCCCTTTCTGCTGCGGCTATGGCAGCGCTTTTGCCGATCCTAAACCATTCCTAAAGA AATGCTGCCCATTTGGGATAAACCTTTAATCCAATACGCTGTGGAAAGCGATGGAAGCGGCTGTGAAGTATG GCGATCGTTACAGGCGAAGAAACGAAAGTTTAGAAGATTATTGACACGAGCTATGAATAGAGCATCAATCCAA GGCATAACAAAGAAACGCCCTAAAGGCAATTCGTAAACATTATAGAGAAATGCTGTTTTCTATGTGCGCCAAAG CAAATGAAAGGCCTAGGCGATGCGATTTAACCAGGAGAGCCCTCATAGGCAATGAGCCCTTTGCGGTGATTTAGC CGATGACTTGTTAGTAAAGCCATGATACCCCAAGCGTTAAAGCAATGACTTCATTGTATCAAAATACCAAT	1884	YAYNAGPGFLRRWLESSKRFKEKNHF EPWLSMELMPYSETRMYGFRVLMNLYL IYQEIFGNFIDGFLEQTLNSKDKP
HP0481	1885	TCCTATTTACACACTTAGGGTTGCAACGCTATTTGAAATGGTGCAAAATTAGGGGCTTTGAAGCGCTCTATAG AGAGACTAAAAAGCCGCTTTGGCCACTCAAAAGCCGTTTAGCTTTAGGTTAAAGATTTTCCCTAAAGCCCAAG CTTGAGCATGACAAACGATTGTTAATGAGCATGCCAAAGAAATTGAGAAACCTTTTAAAGAAATAACAGGTGCAATT TGCGGCGGTCAAGAGCCTTATAAAGATGCGCTCATTCGTATCAACCCATGGGATCATTCCTGTTTATAAAAGCG CTTACGCTTTAAACGCCCTAGAGTTAGCCCTAAACGACTGGATTAAAGGAAATTTGATGGCGTGGCAACGCAACT TTTTAAAGCAATATTATGGAATTTAAGGATCACATGCTATTTCTTATGAACCTTTTAAAGACAGCTTGGAAATTA GTCAACAAGTAGAGCAATTTGCGGTGTCCAGAACCTTGTGTGCGTATGCGAGGGGCGCATGACTTTAGCGC ATTTTGTAGTTGCACTGGAATTTAAGGAAATTTATGGCATCAATGCGATTTCTTATGACACCAACCAAGCAACAA ACGCCCTAAAAATGAAATATCCACGATCAAGAGCGCTAAAAACCATTTTGGTGTAGATGAATCGTAGATA GCGGTAATCTTTAGAAAGCGGTGCTTAAAGTGTAGAAAGAAACACCCGATAAAAAATTTTATAGCGCGAGTTTGT TCCAAAAACAAAGCGGAATACAAAGCCGATGCGTTTAAAGAGCGCTCCTGAATGGATTGATTTCTTTTGGGAAG TGGATTTGAAAAACCTTAAAAAGCCATTAAACATGCAAGTTAAAGAAACAAACAACTCTGCTTAATTCATTAGGTTGCT CTAAAAATTTGGTGGATTGAGAGGTGATGTTAGGCAAGCTTTATAATTACACGCTCACTAATGACGCTAAGAGCGCTG ATGTGATTTG	1886	PILHTLGLQRYFELVQNLGGFEALYRE TKKAALATQKAVLALGLKIFPKSPSLSM TTIVNEHAKELRNLLKEKYQVQFAGGQ EPYKDALIRINHMGIPIVYKSAYNALNALE LALNDLREFDGVANATFLKQYYGI
HP0481	1887	ACGCCCTACCTTATAACCCGGGCAATTTGTTGATCATTCCTCCCATGTCATCAAGCGAGCGTGGAACCTTTAGATCTG AATACTTGGCTGAACATGAATGCAATAGCCCTAAGGTGTTAAAGCGTTGTATGCTTATGCGCTCAAGGGATCAA TTTAGGTTTGAACCTTGACAGAAACGCCGAGCAGGAATCCCTGAGCAATTCACATGCAATTTAGTCCCTAGGTTTT TAGGCGATAGCAATTTATGAGCGTTATCGCTCAAAACGAGGTATGCGGATGGAATTAATGAACCTATCTTACCT TAAAAAACTTATTAGAAAGGAGCTTGGTTGAAACAAACGCTTTTATGTTGGTGGCTACAAATGATTTAATTCAT TTTAGGGAGTGAAGCGATGAAGCGCGTGGTTAAGGCAAGATGCGTGGTTAAGATTTTTCAGGGAGCGC TCACCCCTGCATTTGGCAAGAGTGTCAAGCATTAAGCTTTCCCTTATCCAAAGCGGTGATTGGGAAATTCAGCG ATGGTGAATCAATATCCAAATCAGCGAATCGGTGCGCGTAAGGATTTT	1888	AYPNPGHLLIIPHVHQASVELLDLNTW LNMNALAPKVLKALYAYGAQGINLGLN LHRNAGAGIPEHLHMLVPRFLGDSNF MSVIAQTRVCGMDLNETYLTKNLEK ELG
HP0481	1889	ACGCTCCTCCAGTCAAGCAGCCTTTGGGTAGTGCCACCCAGTAAATGGACGAACAGAGCTTATTAATGAGGG CTATTATGCGATTTTGGGGCTGCGGGCAAGGACTGAAGTCCAGGCTGATGCTTGTGCTAGGCAATCAAGCG AGGTTAGGGATAATGCGGTGCTCTTTCCACTCCACAGCAATTTGATAATCGCATGGGTAGAGGGGCTAAAGT GTATTTAGGCAGTGGGAGCTTGGGCGCGTGGCTTTACTAGGGGAAATCCCACTAAAGAAATACATGAAT TTAGTGAAGTGAAGCTAGAGAGCCAAAGACAAAGATCTATCGCTACATGAACCTTAACCTAATGGAGAAATTCAGG CTCTAGTTTGTTCATTAAAGGGCGGATCCCTTTATTAATTTATGCTGAGCGTTGAGAGAAATAAAAAAGGA GAGTGGCGGTGAAAAAATCGTTGTGAGTTGGTGTGGCTTTTAAAGCGCGGATTCAGCACAAGCCAAAT AAAGCGATCAGTAATGCGGATTTGATTAAAGAGATAAGGGATTAAAAAAATCATCAGCGCGCAAAACACTGAGATT AACAACTTAAGAAAGTCAAGAAAGTGTGTCTGGCAATTAGGGACATGCGTAAGGATATATTAGCACTAGAGA TTATTGCAATAGCTTAAGGCCCTATATCTATTAATTGGCGCTAGGGGATAATCCAAAAATGAAAGCATGCGCCATTCA ATGATGCAATCCTTTAATGTTGAAAAATATGTTGAAAAATTAAGTTGGGGTTTGTCTCGCTCTATTCTCTAT AATGGGATTTATAGGGTTGAGTGTAAAAAGCA	1890	APPSQARLWVPPSKMDEQELINEGY YAIFGAAGARTVPGCSLCMGNQARV RDNAVVFSTSTRNFDNRMGRGAKVYL GSAELGAACALLGRIPTKEEYMNLVSE KLESQDKIYRYMNFNLMEFRL

HP0481	1891	CCAAAAGAGCCATTGCCAATAAGAGCGTTTGATGAAATGGGCGCATCGCTTATGAAGCCCAAAAATCGGG CTTTTGAATATTTGATTTATCAAAATCTTACATGAGCGCTCTTATTACTCTAGCGAAGCCAAGATTGAATACATTG ATATTAGCGCGCTTTAGAGAGACTTTAGGGAGAGTTTACAGAGATTAGGAGAAATGCAATGAAGCGGCGTTAT TGTGGCTTATGTTAATGGCGTTTTCATGGGTGTTCTTAAAGCCCAAGAGATTTCAGAAATATTTTGAAGA AAAAACTTGCAACCCATGGGTTAAGGTGTTAATTAGATAAGAAATCTTATAGTAAGGGCTTCTCTTTAACGC TTATATTGATTTGATAGTAAAGCTCTGTGGTCAGAGCTTGAGTTTGATCGCTGTGGTCTGTTTATATAAAG AGAGGGCGAGCAGGTGAAGCT	1892	QKEAIANKKRLMEMGRIAYEAQKIGLF EYLIQNSYMDALITLAEAKIEYIDISALL EETLGESLRLGELH
HP0481	1893	CTAAGGCGAACAATCCAAAGAAAGCCAAAGGGCTATGCTATTGAGCGATTGGTGCTAATACCCACCGCAAG CCAAGTAGACACAGCGGTGCTATTAGACATGCTAGAAAGGATTAGAGACATCCAAGCGTTGAATGAAACCTTGAAAG CTTGATTGTGATGAACCGCATCCCTACTATCCCACTCTTAAAGAGAAAGCTCTCATTGATTTTATCAACCAAAA TAACGCTAATGAAAGCGTGTTTTAAATGGATAATCTATTAAGCGAAGGATAGCTTATAAGCGTTCAGTGAGTGAAGG CATGGCGGTGATGGAATACAATGACAATAAGCTAAACGAATGGTCTCAATCTATGATGAATGAACGGGTATTT AAGGATCAAAAATGATGAAATGGTAGAATTTATAGTTTAAATCTAAATAACGCTTAATGTGTATGATATTAAACA ATCTACTTTAAGGATAAATATGGAATTTAAACACCCAAAGACAGCGTGAGCGATTAGAAATCGCTTTGAGA ATGCCAACAGCATGAACAAACAAACATGAAAAGAGACAGGAAAAGCCACACGCTCTATATTTCAGAGAAA GTGATGAACAGCGTAGAAGATTGATGAATTTGAGCGTTAGAGAAAATAAAGCGTGTGTTGTTCAA	1894	KGEHSKESQRAMLLSDWVLIPTPSQL DTAVLLDMLERIRDIQALNENLKACIVM NRIPTPTLKEKKALIDFINQNNANESVF LMDNLLSERIAYKRSVSEGMGMVEYN DNKAKNEWSQFYDELNGYLRIKK
HP0481	1895	GCTTGATTCCCAACGAGACATGGACAAAATCAAAAGATTACGCCCTTACAGGGATATGGGGTTAATCTTGCG GGCGTGATATTATCTTGGTTTAAAGAAAGCTTGATGAATTAGACAACCTGAATAAGAGTTGCAAGACGCTCTG CACAAACACTCTAAAATACCAAAACCCCAACGAAAATTAACACCCCTACGAATTTTACGAATGATTTTATTTA AAAATGAGCCTGACTTGGCTTTTAAACCCCAAAAGCCTAGAAAGATTTTTAGGCCAAGAGCATTTAGTAGGGAAGA CGCCCCCTATTAAAGCCCTACAACTCCCAACACTTCCCCATGCCCTTTCTATGGCCCTCCTGGCGGTGATAAA CAAGCCTGGCTCAATCATCGCCTATATGCTAGAGCGGCCCATCTTTTATTCAATGCGAGCGGATTTAAATTAGAGG ATTTGGCGCTTAAGCTTAAATAATACCA	1896	LYSQRDMDKIKTILRLTFIDMGVNLAV DIILRLKEKLDDELNLNKLQDALHKHS KNKTPTKNLNTPTNFYELILFKK
HP0481	1897	CTTCTATCAAAACAGAAACCCCTTGGTGGCTATGCCATCAATAACGCTCTCAAACTCAATAAAGCTTCTTAATCG CTATGCACCCCTATTAGGATAACGCGCTAGCGAATTTGCGGAAGCTCTTTTGCATCACCCTGAAGTGGGGCT GAAGAAATCCTTTTAGGCATGCTTTTAAATGCTTAAACATTGAAGCGCGCCCTAAAA	1898	SIKTENPLVRYAINNALKNKASLIAMH PIKDNALANLCRSSFCITHHEVGAEIILL GMLLKMLNIESAALK
HP0481	1899	TCGCTAAATTAGCTAAGCCATCAATCAAGAAATTTGGCTTGCATCTAATCGCATGCTGGCGGCGCGGATTG GAGCAATTAGAAATTTAGAGATGCGGCATCCATAGCTATACCAATTTAGAGACTTCGCAAAATTTCTTCCCT AAGATTTGTTCCACGCACACATGGGAAGAAAGTTTATCAGATCGGAAACGCTTAAAGCGCGGTTAGGCTTG CAGTGGGGGATTTTGGCTTAAATGAGAGCTGGGAAGATCGGATTGAATGCTTAGAGCGCTAGCTCGCTCTCT CCGCACACCACGCCGATTAATTTTTCATTAAACCCGCTATTGCCCATTTGATGCAGAGACTTTAAGTGCAGATGAA GCCCTAGAAATGCGTGTCTTTGGCTAAGGAATTTTGCCTAACGCTAGGCTTATGGTGGCTGGGGCGGTGA	1900	AKLAKAINQEELGLHLIACCGRADLEQL EFLRDAGIHSYNHNLETSONFFPKICST HTWEERFITCENALRAGLGLCSGGIFG LINESWEDRIEMLRALASILSPHTTPIFF IKNPVLPIDAETLSADEALECVLLAKEFL PNARLMVAGGR
HP0481	1901	TAAAGAAAGCGGCAAGCGCCCTAATCTCGCTAAACTCTATTTAAATGGGCGATTTTAGCACCGAGGATT TTGACAAAGAGTGGATAAATCTAAACCCCTAGCATTAAAGGCGTTTGTCTTTGATTGACTCTCCTGGTGGG CGGTGTACGCGAGCGTGGAAATGAGCGAAATAATCGCTGATTGAAGCAAAAATGCCGTTTATAGCGTATGCTAGG GGGTATGCGAGCGGAGCTATTATGCGGGCATGCAAGCGAGCAAGTTTATGCCCTCTAAAGCGAGTTTATAG GATCCATTGGGTGATTTTTCAGGTGCGAATGTGGAATTTGCTCAATAAGTCCGCTAGCCACTCAAGCGCTG CATCGGGCGGAATACAAAGAAATAGGCACCTTTCACAGAGCGTGGAACCCCAAGAAAAGATTTTTCAAAATTT AGTCAATGAGCAATACCAATGTTTGTGAATGATGTGCGAAAGCTAGGAAATTAGACGCTAAGGATTATAAGGATTT TGCTGAAGGGAAGGCTTTTAGCGCTCAAAAGGCTCTGAAATTAACCTATTGATAAAATCAGCACGATTAAAGCAAG CGCAAGATCGCTTAATGGAATTGAGTAAGGTTAAAGCTTATGGCTAGAAAAGCCCTATGGAGCGCTTCAAT GAAAAGCCACGCAATCAGCCACAACATCATCACAAAGCCCTTGGCTATCAATTATGAGATAAAGATGTTAG AATTTATTTAAATAATCAA	1902	KESAPSAPPNLAALYLNKAIFSTEDFDK EVDKILTPSIKGVLLIDSPGGAVSASV ELSEKIADLKQKMPVLA YARGVMASGS YYAGMQASEVYASKASLIGSIGVIFSGA NVENLLNKVGVATQGVHAGEYKEIGTF TRAWKPNKEDFLQNLVNEQYQMFVND VAKARKLDAKDYKDFAEIGKVFSQAQKAL KLKIDKISTIKQAQDRLMELSKVKKAY WLEKSPMERFIEKATQ3ATNIITQAFGY QLLMR

HP0481	1903	GGGATGTGGATTGTCAACAGAGTGGCTTTGGAAGAAATTTAGCCCTAAACCACCATCGCTTTTAAGCTTTAGCGCG GATAAATCTTTAACAGTGGCAAGCGGCATTATTATGGGCAAAAGAACGGTTGAAGCGTTAAACAAACCCACCC CCTTTATAGAGTTTAAAGGGTGGTAAATCACGCTCACCTTGCTTTTTCAGCTTAAAGCATGGATAAATCATCA AGAAGACATTACAATCCATGCGTTATTGAACCAAACTAAAGACGCATTATTGCAAAAGCCCTCAAACTCTACGCTCT TTTAAAGCCTTTAGAAATGAATGTGAGCATAGCCTCTAGCTTTCTAAATAGGGAATTTGTTGGTAGGGAATTAGAA TCCCTTTGCGTGAAATCCAGCCCAAAACACCCGTCCTTAAATAGTGAGAACTTTATTTAAAGCTTTTCCAAAAG GCGTTATCGCAAGGATTCATGCGAATTCGTGCTTTGAAGCTTTAGCTTGAATGAAAGAAATTTGAAAAAATCG CTCTGGTTTGAAGAAATCTTAAAGCTTAAAAATTCGCTATAATAAAATTTCTTTTAAAGCGCCATATCCCCCA CAAAACGCTAGAGAAATGATAGAAACGACAGACATCAATTTAAAGGAACCTTAAGAAATGGAATAAATCAGCGATCTTA TAGAATGCATTGCGTATGAAATAAATTTGCTTAAAGAGATGATTTCAAAAGTGATTCAGAGGCTGTTTGTAAATAATGG CGCAAAATGAGTTAGACCCCTAGCACGCTACTTGGTGGTTGAAGAAACAAAGCAGCTCCAGCTTATCCAGTTGGTA GAACTTTTAGAAGATGGTGATGAAAGATTGGTTAACGACCTTCTAAATACATCAGCCTGTCTAAAGCCCAAGAAATG GATCCAAAGCGTTAAGATTAAAGACGAATTCCTATAGCTTGAGTTTGGAGAGCATGAAACAAGGAGCGGATCAACCG CCTTTTAA	1904	DVDLSNRVALEEILAKPSLLSFSADKF FNSAQAGIIMGQKERVEALKNHPLYRV LRVGKITLTLFCSLKAWINHQEDITHA LLNQTKDALLQKALKLYALLKPLELNVS IASSFSKIGNLFGRELESFCVKIQPKNT RALNSEKLYLKFQKGVARIISCEFCF EVFSLNEKDFEKIALVLEEILNKA
HP1118	1905	TCATTAGCGATATTAGAAATCGCAAGGAAAAAGCTCTCTAATGCTGGCTTTGAAACCCCTCAAAAACCTCCCC TAAACCCAAAGAAATCCAATCGCTTATTATGCGGCTTGTAGTGAGCGATGAAAGGGGTTTTTCTCAAA TCAGCGGATTTAGCTCAAAATGATATTCGCTCAACAATGTCTTGCAAAAGAAATCTTGCAATCCAACAAGGCTA AAATCTTATTTCCAGCGCACACCACCAACGAAAGTCTATGCTGAACGCCCTTAAAGAGCTTGAAATTTACAAAGCG TGTGGATACCCCAAGATGATTCGTTGGAAATTTGAATGCG	1906	ISDIIARKKSSLMILGFETPQKLPKPK EEIQCAYYARLLVSDEKGVFSQISAILA QNDISLNVLOKEILHSNKAKILFSTHTT NEKSMNLKLELENLQSVLDTPKMIRL EN
HP0149	1907	GAGTATTACAAATTTTGACAAATGCTACTGCAAGAAAAATGGCGTAGATTATTTCAAACGCATCAACGAGGATAAG GGCATGATTATATGGTGGTGATGATAAAACGGGGTGGTATTGTTGATCCGGTCAATCTTAAACCGTAGGCCA ATCAGGGCTTGACGCTCAGAGCGTTGATGGGTGATTATGTTAGGGGTATTTGGAGGCGGCCCAAAAGGGGGA GGCTACACTTATTATAAAATGCCATAATACGATGAGGCGTACCGGAGAAAAATTCGCTACTCGCATTAATGATGAA GTTTCTCAAATGTTGATCGCAACGACTTCTATTACACTGACATTACACAGAAATAAAGCGATCAAGAAAGCGGTG AATAAGTTTTGATGAAAAACACCAAGAAATTTCTTTGGTACTGACAGCGCAGTAGCGTAGTGTTTGACG CTCATATACGCTAAATTAAGGATCGTGAACCGCATTGATGAACCTGCTTAAATCAACGCTTTAGCCGTGGGAT AAGGATTTGAGAGCCAAATTTGATGTGGGTGATCGCAACGATGAAATCTCGCAAGTGGCGGTGGGATCAATTTGTT TGTGAAAAACGCCGCTTGATTATGGAAGAGATTAAAGGATTCCACCTCAATAAACTTCAATGGATAAATAGT CCAAATCACGCAAGAACCAAGAGCATGAAAGATTCTCAACCCACCTAAATTCGCTGAAAAATAAGCCACTG ATATAGCGAGCATGATGATGCTTCCATAGAGCAATCTCAAGGGTTAAGGAAGCGTTTGATTGAAACGCAAGGGCTG GTCAAAGAGAGCAAGGATGCGATCGGGGATTTATTTCTCAAATCACAGAGAGCGGCACACTGAAGAGGAACTCT CTAGCAAAGTGGAGCAGCTAAGCCGTAAACGCTGATGATGTCAAATCCATTCTGGATATTATCAATGATATGCGCGATC AAACGAAATTTATAGCCC	1908	EYKKNFDNATARKMALDYFKRINDDKG MIYMVVDKNGVWLFDPVNPKTVGQS GLDAQSVDGYYVYRGYLEAAKKGGGY TYKMPKYDGGVPEKKFAYSHYDEVS QMVIAATSYTDTINTENKAIKEGVNKF DENTTKLFLWLTATIALVLTLYAKLRI VKRIDEVLKINAFSRGDKDLRAKIDVG DRNDEISQVGRGINLFVENARLIMEEIK GISTLNKTSMDKLVTQITQETQKSMKDS STTLNSVKNKATDIASMMNASIEQSQG LRKRIETQGLVKESKDAIGDLFSQITE SAHTEEEELSSKVEQLSRNADDVKSILDI INDIADQTNLLALNAIE

HP0149	1909	CCCGCATTTAGCCTTTGCTAAAGCTTCGCATGCCCTTTAAGATCCCTTTTTAAAAACCCAGAAAGCGTGATGAGCC TAAACATTTGAAAGAGTAACGATCATGCCCTAATGTTGTGATTGGAGAGGCGGTAGAAATGGCGAAACCTCTTTGAT TTATCCGGCGGTGATTGCTGATGGGTTAAATCGGTAAATGTTATTTGTATCTCTCGTGTACTTTGTATCA AAACACAATTTTAGAAGACAATGTTACTATCCATGCGAGCGATGTGATCGGAGCGGATGGCTTTGGTTATGCGCAC CCGCTTTAGGAGAGCATGTCAAAATGAGCATGTGGGATGTTAGGATCAAAAATGTAGAAATGGAGCTAAC ACGGCGATTGATAGGGCGGTGTTGGCGAGACTTTGATTAAAGAGGCGTTAAGATTGATAACCTGGTTCAATCGG GCATAATTGCGTTTAGCGGAACACAGCATCGTTGTCTCTCAAGTGGGCTTGAAGGCTCTACAAACCTGGCCGT ATGTGTTTTGGCGTCAAGTGGGCAATGGGGCAATTTGCGGAGCGATCCCTGCTATGGAATCCATGAATGGCACC TGCGGTGGTAAAGACTTGCCCCCTAACACTAATTTGCGGAGCGATCCCTGCTATGGAATCCATGAATGGCACC ATTCCTGGCTCATTTACGAACGAATTTAGAAACAGCAAAACCGAGTTTGTGCAAAAAGCTAAAGGTTTTTAA ATCTTAAAGAATGAAATAGCTATAATAAGCCATTTGAATACGAATGATTATTTAATAGGACAATCAATGAAAGA TAGTTTTCTTTTCACTTCTGAATCAGTAACCGAGGGCATCTGACAAATGGCTGATCAATCAGCGATGGGTTTT AGATTACATTATTGAGCGGGATCAAAAAGCCAAAGTCGCATGCGAGACTTAGTTTCTAACGGGTTTTGCATGATCAC TGGCGAGTTAAAAAC	1910	PHLAFAKASHAFKIPFFKNPESVNEPK HFERTIMPNVVIGEG/EIGENSLYPG VVIADGVKIGKNCILYP3VTLYQNTILED NVTIHAGSVIGDGFYAHATLGEHVK IEHVIVRIQKNVEIGANTAIIDRAVFGT LIKEGVKIDNLVQIGHNVCVLGEHSIVS QVGLSGSTTTGRNVVFGGQVGGHIL HVGEFTQIGGKSAVGKDLPPNTNFAG AIPAMEIHEWHFLAHLRTNFRKQKQT SLLQKAKGFFKS
HP0149	1911	AGTAGTTACTATCATTAGGTAAGGGGGGCTGTTAAAGCACCACCGGCTAATTTAGCGATCGGCTGGCT GAGAGCGTAAAGGCTGATGCGGTTGATTTGACATAGGCTTAGGAACCTTGACATGATTTTAGGCTTAGAAAA TCGCATTTGATGATGTTGATGATGGAATAAATGCAACCTTCGAGGCTTTGATCAGGATAAAAGAC GAAAAACCTTTCTTTTAGCGGCTTCACAAAGCAAGGATAAATAATTTAGATAAGGAAAAAGTAGCGATTTAATC AACGCTTTAAGGGCGGATTTGACTATATTTGATTGACTCAGCGGCTGGGATTGAAAGCGTTTTGAGCATGCGAT TTTGATCGGAGCATGGCTTAGTGTGTTAAGCGCTAAGCGTGAATGCTTAAGAGATAGCGACAGAGTGGTTGGC ATTATTGACGCGAAGTCTAATCGGGCTAAAGGGCATGGAGTGCAATAACATTTGATAATCAATCGCTTAAACCT GAATTAGTGGCAATGGCGAGATGATTCTATAGAAAGTGCTTAAATTTTATGCTTGCCTTAAATGGGATCATTC CTGAAGATCACCATATTTTTCAGCGACCAATAAGGGCGAGCGGTTGATTCGACGGATTGCGAGAGCGCGAAGGC TTACCAACGCTATCACCAGCGGATTTAGCGGAAGAGTGGAATACGTGGAATTTAAGGCTAAAGAGGCTTTTTTA GCGGTTAAAGGGATATTTTCATGAGTTTGTGATTTTAAAAACAAAGGAGCGCGGCGCACCGCAACAGACC GATTGAAATTGATTCTAGCCAAAGAGCGCACTTAAATTTACCTACATGGAAGAAATGCGTAAAGAAATCATTGCGG TCATTCAAAAATACACTAAATCTTCAGACATCCATTTCAAAACCCCTTGACAGCAACCGAGCGGTGGAACGATTGAAG TAGAGATTATATTACCTA	1912	VVTITSGKGGVGKSTTTANLAIGLAESG KKVAVDFDIGLRNLDWILGLENRIVYD VVDVMEKNCNLSQALITDKKTKNLSFL AASQSKDKNLDKEKVALINALRADFD YILDSPAGIESGFEHAHLHADMALVVT PEVSSLRSDRVVGIIDAKSNRAKKG EVHKLHINRLKPELVANGEMISIEVLK ILCLPLIGIPEDHHISA TNKGEPIRTD CESAKAYQRITRRILGIEEVEYVEFKAK RGFFSALKGIFS
HP0149	1913	CAATGTTTAGAGGGCTTGAGCGATAGTGAAAGGGCGCTAATTTAGGAATTAACGACAAGCTGATGAAGTGGATCT GATTTATAGCGATCTAAGAAACCGTAAACCTTTGATAACATGCGGCTAAAGGTTATCCATTGTTACCAATGGATT CAAAATGGCGCGATATTGCCACTATTACGCCACTAATGTTGATGCGGACAAAATAGCTAGCGATAATCCTATTTA TGCTCCATAGAGCCTGATATTGCCAAGCAATACGAAACAGAAAACCATTAAGGATAAGAAATTTAGAGCTAAAT AGCTAAGGCTTTAGTGCGCAATAAAAGATGACGATAAAGAAAAAGTAAAAATCCACAGCAGAGCTAAAGCAG AAAACAATAAGATAGACAAAGATGTCGCAGAACTGCCAAGATATCAGTGAATCGCTTTAAGAACAAAAAGAAA AGAGTGGGAAATTTAGATGAAATGGTAATCCCATTTGATGACAAAAAGAAAGCAGAAAAACAGATGAAACAAGC CCTGTCAACAGGCTTTATAGGCAAGAGTGATCCCATTTGTTTAGCGCAATACACCCCATTTGAAATCACTCTG ACTTCTAAGTAGATGCCACTCTCACAGGTATAGTGAGTGGGTTGTAGCCAAAGATGTATGGAACATGAACGGCAC TATGATCTTATTAGACAAAGGCACTAAGGTGATGGGAATTAACAAGCGTGAAGGTTGGCACACCCATTATGACAC GCTTAATGATAGTCTTTACTAAAGCCATTACGCTGATGGTGATATACTCTAGCAACGCTCAAGCAGCAGGC ATGTTGGGTGAAGCAGGGTAGATGGCTATGTAATAATCACCTTATGAAGCGCATAGGCTTTGCTGTGATAGCAAG CGTGGTTAATAGCTTCTTGCAACTGGCCTATCATAGCTCTAGATAAATCATAGGCTTGGCAAGGTAGAAAGT AAAGGACACCTGAATTTA	1914	QCLEGLSDSERALILG KROADEVDLIY SDLNRKTFDNNMAAKGYPLLPMDFKN GGDIATINATNVDAADK/ASDNPIYASIEP DIAKQYETEKTIKDKNLEAKLAKALGNN KKDDDKESKSKSTAE/KAENNNKIDKV AETAKNISEIALKNKKEKSGEFVDENG NPIDDKKAEKQDETSIPVKQAFIGKSD PTFVLAQYTPIEITLTSKVDAATLTGIVSG VVAKDVWNNMNGTMILLDKGTYVYGY QSVKGGTPIMTRLMIVFTKAITPDGVIP LANAQAAGMLGEAGVDGYVNNHFMK RIGFAVIAVSVNSFLQAPIIALDKLIGLG KGRSERTPEFNALGQAINSGMSQSSA QMSNQLGQLMNIPPSE

HP0149	1915	GGTAACGCAAGCAAAAGCGACCTTGAAATTCGGTTAAGATGTGATCATCAATCAAAAGGTAACGGATAAAGTTG ACAATCTCAATCAAGCGGTATCAGTGGCTAAGCAATGGCGGATTTCAAGTGGTAGAGCAAGTGTAGCCGATCTC AAAACTTCTCAAGGAGCAATGGCTCAACAGCTCAAAAGTGAAGATTTCAATAGTGAAGAAATTTCTGAACATAT ACCAATCCGTTAAGATAGTAAATAAACCCTAGTCGGTATCTGGAATAGAGGCCACAGCTCTCGCC AAAAATTTTCGGATATCAAGAAAGATTTGAATGAGAAATTTAAATAATTTCAATAACAATAATAGGACTCAAAACA GCACAGAACCCATTATGCTAAAGTTAATAAAGAAACAGGACAAAGTAGCTAGCCCTGAAGAACCCATTATATCTC AAGTTGCTAAAGGTAATGCAAAATGACCGACTCAATCAATAGCAAGTGGTTGGTGGTAGGGCAAGCA GCGGGCTTCCCTTTGAAAGGCGATGATAAGTTGATGATCTCAGTAAGGTAGGCTTTCAGCTAGCCCTGAACCCAT TTACGCTACGATTGATGATCTCGCGGACCTTTCCCTTTGAAAGGCGATGATAAGTTGATGATCTCAGTAAGGTAG GGCGATCAAGGAATCAAGAAATTTGGCTCAGAAATTTGACAATCTCAATCAAGCGGTATCAGAGCTAAAGCAGGTTT TTTGGCAACCTAGAGCAACGATAGACAACTCAAGATTTCAAAAGAAATTTGATGAATCTATATGTTGAAAGT GCAAAAGAGTGGCTGCTAGTTGTCAGCGAAATTTGACAAATTTGCTATTAAAGCAACACAGCTAATAGCAAT ATCCAAATGGAGCAATCAATGAAAGGCGGCGGATGCTAAGCGCAAAACCCCTGAGTGGCTTAAAGCTCGTGAA TGATAAGATAGTTGCG	1916	VTQAKSDLENSVKDVINQKVTDKVDN LNQAVSVAKAMGDFSRVEQVLADLKN FSKEQLAQQAQKNEDFNTGKNSELYQ SVKNSVNTLVGNGLSGIEATALAKNF SDIKKELNEKFNFNNNNNGLKNSTEP YAKVKKKTGTQVAVSPEEPIYTVAKKV NAKIDRLNQIASGLGGVQGAAGFPLKR HDKVDDLKSVGLSASPEPIYATIDDLG GPFPLKRHDKVDLDSKVGRSRNQELA QKIDNLNQAVSEAKAGFFGNLEQTDK LKDSTKKNVNLVYESAKKVPASLSAK LDNYAINSHTRINSNIQNGAINEKATGM LTQKNPEWLKLVNDKIVAHNVGVSLS EYDKIGFNNQNMKDYSDSFSTKLN AVKDKSGFTHFLANAFSTGYCLARE NAEHGKKNVNTKGGFQKS
HP0149	1917	GATCGCCAAAATGTTAAGGGGTGGATTACAGGGTGTCTATGCTAGCGCTTATCGGGTTTGTCTATCGGCATG GGGGTTTATCAGGCTCTATCCCTTAAGCGTTGCCACCCAAATGAAATCTATCCAAATAAGCGCTGGGTGATT GAAAAGCTATCCCTATCAGTCAGACGATTTTCTTCTTATAATTTAATCATTATAGGATCATCTTGTAGGGTTAC CCCTTTTAAAGGCAATGATCCACCTTAAAGAAAGAAATCGTTGAGATTGATTCAAAGCTTTTAAAGACGAGTACA AAGAGATTGAACCTATTAGCCACCAACAAAGACAAACGATCGCGCATTTTGTGAAACACGCGCTTTGCTTCTTATC TTTTGGTTTTTGGGT	1918	IAKNVKGVDYRLLIASAYSQFVWHGGL SGSIPLSVATQENENLSKISAGVIEKAIP SQTFSSYNLIIGILVGLPFLMAMHPKK EEVEIDSKLLKDEYKEIELISHQDQKTIA HFLENSALLSYLLVFLG
HP0149	1919	GCAGATCCGCACCTTTGATATGCATATGGGGCGGAGTATGTAATTCAGCCCACTGGAAGTATAAGCCGGGGCG GTGGATCATGAAGATCATGAGGCGATGAGATGGTTGCAAAATTTAAATACCATGACAGCGATTGAAACACGA CCCTAAGGAATTTACGAACTCGTAAGAACGATTTGTATCTGTAAGATAATGCTGTTTTTTCGCTCATGGGACAC TTACACTTTACCGGTGGTGGGCTTATAGATTTTGTCTACATGGTGCATAGCGATTGGCGGATAAAGCCACGG ACGCTTATATCAATAGTAAAGAAAGCCCTTACTCAATCAGGAATTAAGAGTGGGATGTTGTTAAATCATTAAGGCG ATAAAATAACCTCGTTTCTATTTGGATGGATCAGCTTAAACTTCTAAGGCTAAACCACTTTCGCGCATCCAAAGAA AAACCGCTTGAAGAGGTTGACACTAAGAGCATGATCAATATCTAGCGACTTTTTCGCGCTCTGTTTTTGAAGA CATGGATTTAAAGGATTATAAAACTTTGAAGAAAGATTAAACAGATTGCGGGTGGAGACCCCTTAACAGAACGGA TGAAAAGTTTTGAAAATTTAGCCAACTCACTGAAGAAATTAAGGATTTTCTTAAACCAATGCTTGAATTTTTAGC AGAAATCCAGAGATGAGTTTATGGACTCGAGGTTTAAAGTATTTGGCTTTAAACCAATGCTTGAATTTTTAGC CCCCAATCGGCAGTGGCAGTGAAGGAATTAGAACATTTAGCGTTTGTCAAGCAACGCTTAGAAATCAACACAGG TGTTGTTGAATGATTGTTGTTACCTAAATATGGCGATGAATCATTCGATTGTAAAGGATTTAAAGATCCAAAG CGATTGCGCACCAATAATTTGCAAAAGCGATGGCGGAAGTAGATGCTAAAGTGCCTATGCTTATATAGATGG CACAAGCGGGATCGA	1920	QIRTFDMHMAEYGNASHWKYKAGG VDHEDHHEGMRWLQNFYHDSDLKN DPKEFYELAKNDLYREDIVVFSPHGDT YTLPVGAIALDFAYMVHSDLDGDKATDA YINSKALLNQELRSGDVVKIIGDKIIP RFIWMQDLKTSKAKNHLRIQRNRKE VDTKSMINILATFFGRSVFEDMDLKY KNFEERLTCGVETTLTEAMKSFENLA KLTEIEIKVFSLKEDALEYQEMSLWT RGLRYLGFKTNVLFAPNRQWQCKE LEHFSVCSNALEIKQVLLNDCYPKY GDEIAIVTDLKDPKAIHKKFKKAMA EVDKVPVYIEWHKKDRRTIYKMMFYL GEKKSVLAGLLTFLNRNECNVGVSYL GYKDKYSSHCEVSFEIATDKADWIRALI NRKYQDRIVELSSLDAYES

HP0149	1921	AGTTTTTGTATAAAGGGAATACCAAAATTCATCGCTATCACAAGCGGTAAAGGAGCGGTGGGAAATCCAACAT TAGTGCTAATTTAGCCTACTCTCTATACAAGAAAGGTTATAAGTGGGGTGTGATGCGGATATGGTTAGCGAA TTAGATGTGATTTTGGGTGAACCCCAATATAATATCTTGACGCGCTTAAAGGTGAAGCCAAATGCAAGAAAT CATTGTGAGATTGAACCGCGCTTGTGATCCCGGGATAGCGCGGAAGAAATTTAAATACATTAGCGGTG CAGAAGCTTTAGATCAATTCGTGATGAAGAGGGGTTTTAAGCTCTTTGGAATTATTTGAGTATGATACGGGTGCT GGGATTGGAGCTACTACGCAAGCGTTTTGAATCGAGCGATTGCGGTGATTGTTACACACCGCATCCTTCAGC GATTACCGATGCGTATGCATGCATTAAATCAACTCAAGATAAAGATGAATGTTCTTATCGCTAACATGGTAGC CCAACCTAAAGAGGGTAGGCGGACTTATGAAGGCTGTTAAAGTGCGCTAAACCAATATCGCTTATTAGAATTGC ATTACTTAGGGCGATTGAACACAGCTCTTATTGAACGCTATGTAGGAGCGCAAAATTTGAGAAAAATAGCC CCTAACGATTTGTTTCGCAATCCATTGATCAGATAGCGGCGCTTTGTTCTAAATTAGAAACCGGTGCTTTAGAA ATACCAAAAGAGGTTTGAAGGCTTTTTTAAAGGCTTTTGAAGTATTTGGGTAGGCTTGAATGAAGTGCAAAAT TTATCCATTTTCTGTTGGTAGGTTTTTTTTGGGGTAGTGTTCGGTGTGAATTTCAATGAGCCAGAGAGCA TTTTATTATGACGGTGTATCCACGCTTGGGGGTACTTGATTGCGTGTGTTTTCGCTATTTTATCGCTTGCA CGGATTTGGATATT	1922	SFFDNKGNTKFJAITSKGKGVGKSNISA NLAYSLYKGYKVGVFDADIGLANLDVI FGVKTTHKNILHALKGEAKLQIIEICEIEPG LCCLIPGDSGEEILKYISGAELDQFVDE EGVLSLDYVVDTPDPSAITDAYACIKINSKNK SDCVVIVTTPDPSAITDAYACIKINSKNK DELFLIANMVAQPKGRATYERLFKVA KNNIASLELHYLGAIENSSLLIKRYVRER KILRKIAPNDLFSQSIDQIAGLLVSKLET GALEIPKEGLKSFRRLLKYL
HP0149	1923	ATCCAAGCCATTAGCTTTAATACCAACCAACTCAAAATTAAGGTGAAGATATCAAGAAAAAGTCCCATTTATCTG TATTTGGCGATGTTTGAAGAAATATTGTCATATTGTAAGCGCTTTATGGCTGATAACGCAAAACGATTTATATTGA TGAAGTGGAGATGGCTTACACTTTCTCGCATGAGGTTATTGTTAAAAATACTATTGATTTTATCAACAATAATAA GATGGTAATTTGCAAGTGTATGACTACCCACAGCCCAAGATTTATAGAAATTTAGATCAAGTTATCAGAGAAAA GATTTGGCATCAAACTAAGTTGTTTGTCTTAAGCAAGCATCAATATGTTATCCCAAGAACTTATTATGGAGAAA ATTTAGAATAATTACTTTGAAATGAAGAGATCTTTTGGTTAAGCACTATATTAAGATTAGGATCATTTAATGGCAGA TAAAGAAATACTGATTTTGTAGAGGTCCAGCGATAAGGTGTTTTAGAGTTTTATCTGATTTTCTAGAAAGATTT CCAATCAAAACTTTAAGTGCAAAATGTAGATGAAAGATAACCTGTCTAAACGATTGCTTGAATTTGAAGAAATAC GATAAACACTTATCATTTTGTGCGGATAAAGACTATGAGAGTAATAAAGAGATTTTAAAAATTGTATCAGAT CGAAACAACTATTTCAGAAGAACAAATTTTTTATTTCTAATAATCAAGATGATGGCGATTAGAAACCTATTATTA AAGATTGCTAACCAAGAGTTTCAAAATTTTGAAGCTATTTGGATTGATTAAAAAGAAAGAACATTACAAAC CGATTAAACATAGAAAGAAAGTAAAGTGGTATGCCTATTTAGAGCGCTTGGATTAGAAAAATTTTCCAATACACATG GGACACAAAGAAAGAAATATAAAGAAAGCTTATCATTTGACGATAAAGATGGAGATGAGATTGAGATAAAGAT ATTGAATGGCTTAACACCGCGGAGAGCTTAAAAACGAAATGAAGAAATACGAGGCTTTTTTAGCGATTTCAAT ACGAGCATGCGCACCAACGAGCAAGTAAGTAACTTTAAACGCTAACCCGAAACATCAAAAGCGAGATTAA AAAGCTAGAAATCAATTGATAGAAACCACTACAGGCTTTTAAACGAGCTATCAAAATCTTTTAAACAAACGCTAGGGA TAGCGCTAACAAATCAATCAGGCTAACAAACCGAAAGCTTGAAGCGCTAACCAAGCGAAACAAAGTGTCTAACCA ACGAAATAACCGCTAATCAACCGCAAGCGCTAACTAACATTAACGAAGCAAAAGAAACGCTAACCAATCAAAATACCG AAAAATAAACCCAGCGATAACTAACATTAACGAAGCGGAAAAACCAATCATTAACAAACATTTTGTGAGATTG AATAAGGCGGTGTTAAAAACCACTATAATACCCCTAAAAATGCGAGTTTAAACATGCGCTTATTGATTTAAAAAGC CCTTATCCACCGAGGCGATCAGCCCAAGCCATAGAGCCCTGACGAAAGCTTGAAAGAAATACCAACCATTTATCA AACTTTAGTGGGGTTACAGGAAGCGGTAAAGACTTATACGATGGCCAAATATCATCGCTCAAAACCAATAAACCCGCTT TGATCATGAGCCATAATAAGACCTTATGCGCACAGCTTTATA	1924	IOAIFNTNNQLKLVKDIKEKPLSVF GDGLKLYLHIVSAFMADNAKTIYIDEVE NGLHFSRMRLLKNTIDFINNNKDGNL QVFMTHSQEFIEILDQVIREKDFAHQT KLFCLKQDDQVVPRTYTYGENLEYFE NEENLFG
HP0149	1925	ATTGAATGGCTTAACACCGCGGAGAGCTTAAAAACGAAATGAAGAAATACGAGGCTTTTTTAGCGATTTCAAT ACGAGCATGCGCACCAACGAGCAAGTAAGTAACTTTAAACGCTAACCCGAAACATCAAAAGCGAGATTAA AAAGCTAGAAATCAATTGATAGAAACCACTACAGGCTTTTAAACGAGCTATCAAAATCTTTTAAACAAACGCTAGGGA TAGCGCTAACAAATCAATCAGGCTAACAAACCGAAAGCTTGAAGCGCTAACCAAGCGAAACAAAGTGTCTAACCA ACGAAATAACCGCTAATCAACCGCAAGCGCTAACTAACATTAACGAAGCAAAAGAAACGCTAACCAATCAAAATACCG AAAAATAAACCCAGCGATAACTAACATTAACGAAGCGGAAAAACCAATCATTAACAAACATTTTGTGAGATTG AATAAGGCGGTGTTAAAAACCACTATAATACCCCTAAAAATGCGAGTTTAAACATGCGCTTATTGATTTAAAAAGC CCTTATCCACCGAGGCGATCAGCCCAAGCCATAGAGCCCTGACGAAAGCTTGAAAGAAATACCAACCATTTATCA AACTTTAGTGGGGTTACAGGAAGCGGTAAAGACTTATACGATGGCCAAATATCATCGCTCAAAACCAATAAACCCGCTT TGATCATGAGCCATAATAAGACCTTATGCGCACAGCTTTATA	1926	IEWLNNAGESLTKMKEYEGFFSDFNT SMRTNEQEVSAITLNANTENIKSEIKKLE NQLJETTRLLTSYQIFLNNARDSANNQ ITANKTESLEALNQAKTSAANNEITANQT QALTNINEAKENANNQITENKTQAITNI NEAKNQSLSKH

HP0149	1927	AAAGACGCTAAAGATTTGACGATGCGATTTTATGACCAAGAAAAAGGGTTTGTGGCGGTTGCTGATGTG AGCGAATTTGTGCGGAACATTCAGTTTGATAAAGAGCTAGGGTTAGCGTTTACCGTGTATTTCCCTAATAG CGTCTATCCCATGCTGCTTGTGCTCAAGGGCATGCTCATTAAGCGGTTTGAAGCGCTGCTGCTTTAGT GTATGAATCCCTTAGATAAATTTGAAGCGCTTAAAGCGCTTATCAAGCGCTTATGAAGTTAGGCTAATGCACTTAT GAAGAAATCAATCATTTTAAAGCGCTAATCAAGCGCTTATGAAGATTTGCAACAAAGCGCTTTAGGGTTTGTAG AAATGGCTTTAAAGTTAAAGAGGAGCGTTTAAAGAGGTTTAAATTCATTTCTTTGAAACAAGCTGTATTGAA TAAAGAGGGCGGTATAGAAAAAATTGAACAGAAAAAGAGCGATGCGCACACCTCATAGAAAGAGCCATGCTCT TAGCCAACCAATCTAGTGGAGGTTATTGGATGAGCATTTTCACAATAAGGGGATATACCGCACCCATAAGAGCCCC AGTTTGGAGCAGCAAAACGCGCTTTACGATAAGCTTTTATGATTGAGATTGTGCGCCCTAAACACATGGGCTTTT CCTTTATAGAGCATGCCTTAAATAATAGCCAAAGAAAGAGTATAGAAAGAGAGTTTCGGCTTGATCATCAAGTCT CAAAATTTAGCCCTTATAGCCCTGCAAGAAAGCCATTTTGGTTGGGTTTGTAGCTATACGCTTACCTTACCTCG CCCATAGACGATACAGCGATCTAGCCTTACACAGCGCTTTTAAAGAAATTTGTTTATCAAGCTAAAGCGCTGCTCG TATTTGTTAGAAAGAGCGCTGAATTATGCGCTGAGTTGAACGCTTTTGCAAAAAAGCGCGCTTTGATTGAAAGGGAT TTTATCAAGC	1928	KDAKDFDDAIFYDQEKRVLFVAVADVS EFVPKSSLDKEARVRGFSVYFPNSVY PMLPLSLSQGACSLKAFKRLALVYEIP LDNLKNARLSQGVIEVRANCTYEEINH FLSANQSSLDKDLQQSLGFLMALKL KKERLKKGFNFNSFENKLYLNKEGRIE KIETEKESDAHTLIEEAMLLANQSSARL LDEHFHNKGIRYTHKEPSLEQQKRLYD KLFDEYVRPKNMGMFFPFLEHALKIAKE KSIEREVSRLIJKSNLALYSPLQESHF GLGFASYTHFTSPIRRYSDALHRLKE LLFYQAKGCSYLLEETPELCAELNALQ KKAALIERDFIKRKFARLALLEKEFLG VLEVKDWVWVGLKEFIGLKV
HP0149	1929	AAAACCCCATGCCAAGCGTCAAGGGTAAACCTATATCTTAAAGATGAAGAAATTGATCGGATAATCCCTGAGGG CATTGATGATCAAAACCGCATGGTGCTTAAATAAAGGCAATGAATACGAGAAGGGAAGAGGGGATTTGTATT TAGAAGCGCAAGTCAAGAGATGAGCATTTCAAGCGGAGGCTGCGATTATTCATTAAAGCGCGGCTTTTTC ACCACTATCGCTTAGGGCATACGATTAAAGTGCCGCTTTAAAGGGGACGAACTGGAAATTAATAATCCCTAGAAA CGCCAGAGACAGCAGACTTTTGGCTTAGAAACGAGCGCTGAACACCCCTGAAGCTCTTATAGAGGGAGTTTG ATCGTGGAATTGCAAGTGAATACCCCTAAAGTTGAATAAGAGCAGCAAGAAATTGTTGAAATAATGCGAGT TTTGGCTATAGGGCGGAGCGGCATAAAGCGTTTAGAACCTGTATTTCTAAATTAAGACTGGTTCAATAAAG GTTGTTGATGATGATTTCTAAAGCTTTTAAAGCGCTTTCCCTCATACCATTTCTATCTTGTAGGGTATTGCTT ATGGGAATGACTTTTGGAAATGCTTTTAGTCCAGCAAGGATGATTATAGTCCGCTTGTTCATGCTGTTATTCATC TACGCTGGGCGGTGCAATTTGTAGCGATCACGCTTTTAAAGCGCGAAGCGAGCTTGATGAATGCTGTTATTGTA GCTTGTGCTGAATGGGAGACAGACTTGTACGCGCTTTCTATGCTAGATAGATTAAACACACTAAATGCGCTTGC CCTATTTAGCGCACGCGCTCACGGATGAACCTTTGCTTTATGAATTTATACGCTCCTAAAGAGGGGTTAGTGAAA AAGACTTTATTTAGCATTTCTTACTCAACCACTCTTATTGGATTTTGGCTCGTTGGTGGGTTGTTAGTGGGTTG GCAATTTCTTTGAC	1930	KTPCOACKGKTYILKDEEIDAIIPEGIDD QNRMLVKNKGNEYEKGRGDLYLEAQ VKEDEHFKREGCDLFIKAPVFTTIALG HTIKVPSLKGDELELKIPRNARDKQTF FRNEGVKHPESYRGSLLVELQVIYPK SLNKEQQELLEKLHASFGYEGEPHKS LETCISKIKDWFK
HP0028	1931	CGAAATCACTTCTAACACCGCCACCGCTGCCGCTTTTACCGGTGATTGGAGGGTTGCGATGGGCATGGGTTA TGAAACCATCAGAGCTTGTATTGACCATTCCTGTAGCCTTGAAGTGGAGTGGGCTTGCCTCCCTGCTGCTCA CCCACCGAATGCAATAGCTTATGGCTCTGGTATGTAAATAACGGACATGATTAAAGCGGTTTGTGGCTTAAT CTGGTAGGAGTTGTTTGTAGTACAGCTTTAGCTATTTTGGTTTGGTTTCTGTTAATTAATTGATTAAAGGAAAAAGTGA AAGAGAGTTATTAAAGAAAAATCTCGTTACATTACAGGGTTTGTATCATCATTTGTTGCAAGCTTGATTTTATATGC GGACAATTTGTTGTTTGGCGGTTTATGGGGGATTTATCGGTAGGGTTTCTGAAGCGTTAAGATTATTCCA AGTTAAAGCGAGCTTAGCCTGTATCTCATTTAGTGTGTGCTGCGGCGTATTTAACGGGCTCCTATAG AATGCGCTTTATTAGCGCCATGGTATGCTTATCGCTTATCAAAAGCGCACCATAGCGAAGCCATTTTAC CCTTTTGTATCCGGCGTTGGGTTTGTGGCTTTTGGGTTTATAAGGATTTTGGTGCAGTAGCGATCATTTGGC TTTTAGTGTGGTGGTTCAGAGCGATGTGGGGGCTTTTGGAGGCAAGCTTTAGGCAAAACCCCTTTACGCCCC ACTTCGCGGAATAAACCTTAGAGGGCGCTTGAATGGCGTGTGTTGGCGAGCGTTTAGGATCGTTTGTGGGCAT GGGGAATTAGCGGAGGCTTTTATGGCGCTCTTTTATGTTTATGCTCTTGTGGCGGTTTGTGGGATTT GTATGAAAGCTATTGAAAGAAAGGTCGGTATCAAGATAGCGGTAAGATTTTACCGGGCATGGGGCGTTTAG ACCGGTTGGATTCCAT	1932	EITSNTATAAFLPVGGVAMGMGYEN HQSLLLTIPVALSATCAFMLPVVTPPNA IAYGSGYVKITDMIKAGLWNLVGVVLI STFSYFLVSLFN

HP0028	1933	CGCCTATTGGAGCCCTTATCCAAAGCCCTTAGCCAGCTGATGAAAGGCCCGTTTACAGTCTTTCGGCTCTAAAGTT AAAAAATCTTAAGCACCTTACCTGAAAGCGTGAATTACTTAGCGAGTGGTTTGAAGAATCTTCAAGCTCATCACC CCGGCGGTGTTTTGAAGATTAGGCAATTAAGAGCCGCTGCTAATAGGCTATTAATGGCATGATTGAGCGGCTATTGAA ACCTTAAATAGCCAAAGAGCTTAAAGAGCCGCTGCTAATCCATGCGCAACCTTAAAGGGCAAGGCTATAAGAT CGCTGAAGGGCGCTATGAAAAATGGCATGGGTGGGCTTTTGAATGGATACCGGCTTGTCTAAATAATCCAAAA GCGCAATCTTATCGCCACTGAAGCGTATTCTAACACCCCTTTAGAAATAGCTAAAGATGAAAAATCGTAGCGG TAACCGCGCGGATGCGCTAGCGGCACAGGATTAGACAACTCATTGACGCTTACCCCTTGGCTTTTGTGATGCTCGCT ATCGCTGAGCAACACGCTTAACTTCTAGCAGCGCTATGGCTAAGAGGGTTTAAACCTTTTGTGAGCATCTATTCT ACTTTTTCAGAGGGCTTATGATTCTATTGTGATGACGCTTGTATTCTAGCTTCCGCTTAAATAGCCATTGACA GGCTGGGATTGGGGCGAAGATGGCGAGACGACCAAGGGCTTTAGACGCTGCTGTTTGGCTCTATCCCTAA CATGGTCAATTTTGGCCACGAGACAATGAGACTTTAAAAACCGCGTGGCTTTGCCAATGAACACGATTCAAGCC CTTGGCGCTCCGATACCCTAGGGGCTGTTTGGCTTAAAGAGGGGTTTGGCCTAGCGGTTTGTGTTTAGGC CAAAGCGAATTTGTAAGAAAGAGGGCGGAAATTTACTCATAGGCTATGGTATGGCGTGGGCGGCGGCAATTTAGT CCAACTGGCTTTAAAAAGA	1934	IPIGALSALSQMLMKPFYQSFRRSVKKI LSTLPESVNYLASRFEESFKLITPGVFF EELGINYGPINGHDLIAIETLKLAKELK EPVLIHAQTLKGKGYKIAEGRYEKWHG VGPFDLDTGLSKSKSAILSPTEAYSNT LLELAKKDEKIVGVTAAMP'SGTGLDKLI DAYPLRFFDVIAIEQHAL'TSSSAMAKE GFKPFVSIYSTFLQRAYD3VHDACISS LPIKLADRAGIVGEDGETHQGLLDVSY LRSIPNMVIFAPRDNETLKNVRFANE HDSPPCAFRYPGRGSFALKKEGVFEPSG FVLGQSELLKKEGEILLIGYGNVGRA HLVQLALKEKNIECALLDLRFLKPLDPN LSAIVAPYQKLYVFSNDNYKLGVASAIL EFLSEQNILKPVKSFEIIDEFIMHGNTAL VEKSLGLDTESLDAILKDLQGER
HP0028	1935	TTCTAAAAAACCCCAACATTCACCCCAAGATTTATCCAAATGAAGAAGCAAGCCCAATCATTTTGAAAAATCCT TTAAAGAAATCCAAAGAAAGCTCAGATCATCTTGACAAACCCACAGAACTCAAACTTTTATGATGGAGACAAG TCAGAAAGAAATACTGACGACTCTAACGATCAAGAGATTATCAAGGAAGCAAAAGAAATATATTATTGGTGCCATT GTAGTCGCTGTTCTTATCGTGATTATTTATTTCTAGAGCAATTTTCACTACTTCATGCTTGGGAAGATAAAGCT CTCGTTTAGCAAGACAGGAATCTTTATGTCAATGATGAATCCAAATAGGCAAGAGATAACCGATTGCTGAAAG AACGGAATGAAAAAGGCAATATGATCGATAAGAAATCTTTCTCAATGACGATCCCAATAGAACCTTATACAACTATT GAATATTGCAGAAATTGAGGACAAACCCGTTGAGAGCCCTTTATG	1936	SKTKQHSQDLSNEEAIEANHFENL LKESKSSDHLNDPTETQTNFDGDK SEITDSDNDQEIIGSKKIKYIIGIWA VLIVLFSRSIFHYFMPLDKSSRSFKD RNLYVNDIQIRQEYNRLKERNEKGN MIDKNLFFNDOPNRTLYNYLNAIEDK NPLRAFY
HP0028	1937	GGGTAGAGCAAGTGTAGCCGATCTCAAAACCTTCTCAAGGAGCAATGGCTCAACAAAGCTCAAAAAATGAAGAT TTCAATACTGGAAAAAATCTGAACATACCAATCCGTTAAGAAATAGTAAATAAAACCCCTAGTCGGTAATGGGTAT CTGGAATAGAGGCCACAGCTCTGCCAAAAATTTTCGGATATCAAGAAAGAAATGAATGAGAAATTTAAATAATTTCA ATAACAATAAATGAGCTCAAAACAGCACAGAACCCATTTATGCTAAAGTAATGCAAAATGACCGACTCAATCAAAATAGCAA CTAGCCCTGAAGAACCCATTTACTCAAGTTGCTAAAGGTAATGCAAAATGACCGACTCAATCAAAATAGCAA GTGGTTGGGTGGTGTAGGGCAAGCAGCGGCTTCCCTTGAAAGGCAATGATAAGTTGATGATCTCAGTAAGGT AGGGCTTTCAGCTAGCCCTGAACCCATTTACGCTACGATTGATGATCTCGCGGACCTTCCCTTTGAAAAAGGCATG ATAAAGTTGATGATCTCAGTAAGGTAGGGCGATCAAGAAATGGAATGGCTCAGAAAAATGACAATCTCAATCAAG CGGTATCAGAAAGCTAAAGCAGGTTTTTTGGCACTAGAGCAACGATAGACAAAGCTCAAAAGATTCTACAAAAAG AATGTTATGAATCTATATGTTGAAAGTGCAAAAAAAGTGCCTGCTAGTTGTGAGCGAAATGGACAATTTATGCTATTA ACAGCCACACAGCATTAATAGCAATATCCAAATGGAGCAATCAATGAAAAAGCGACCGGTATGCTAACGCAAAA AACCCCTGAGTGGCTTAAGCTCGTGAATGATAAGATAGTTGGGCAATATGTGGGAAGCGTTTCTTTGTCAGAGTATGA TAAATTTGGCTTCAACCAGAAATATGAAGATTATTCTGATTCGTTCAAGTTTCCACCAAGTTGAACAATGCTGTA AAAGACATTAAAGTC	1938	VEQVLADLKNFSKEQLAQ'CAQKNEDF NTGKNSELYQSVKNSVNTLVGNGLS GIEATALAKNFSDIKKELNEKFNFNIN NNGLNKSTETPIYAKVNNKKTQVVASPE EPIYQVAKVNAKIDRLN'QIASGLGGV GQAAAGFPLKRHDKVDDLSKVGLSASP EPIYATIDDLGGFPPLKRHDKVDDLSKV GRSRNQELAQKIDN'LNQAVSEAKAGF FGNLEQTIDKLKDSKKNNMNLVYESA KKVPASLSAKLDNYAINSHTRINSIQN GAINKATGMLTQKNPEW'KLVDKIV AHNVGSVSLSEYDKIGFNQKNMKDYS DSFKFSTKLNNAVKDIKSGFTHFLANAF STGYY
HP0028	1939	CTTTTCTGGGACTTCTAAGCGAGCGTGTCAAGAGATGGCAAGATGACATGATCATTAGAGTGCCTGAT GACAAGCGCGTTCTGTAGAGACATCAACGCTTGCAAGTGGCTAACAATACGATAAAATGATGTTTTAGACGCT TTAGTGGAAATCACAGAACTAAAGCCGCTCCAGTATTTCTCGCTATACCCGCAACGCGGTTACGGTGTGCTGC TGAGCCTAATAGGAATCGGGCGTTTCTTTAGCGGAGATTTTAAACGCAAGTGAGCAAAACACATAAAGATGGTTGG TTGAAGGGCGGAATTACAGATTTACCGGAGAGCGGATAACGCCAAAGAGAGCAACGGGAGTTTTTAGTCGCTT AGCGACAGCGTTTGTGCTGATTTATGATTTAGCGGGCTGTGATGATGCCATTTAGAGCCTTTTATCATCATGCT TACCATGCCCTTAAGTTTTTACGGGGCGTTTTTGTCTAGGTTAGTCCATCAGCCTTTGAGCATGTTCTCTATGATA GGCTTGATTTGCTCATTTGGTATGGTGGTAAAAACGCCACGCTTTTAAATGATGTGGCGAATGAAGAGCGGTA AGGTTTGAATATCAAGAGGGCCATTTT	1940	FSGTSQASVFKEDGKEYD'VIIRVPDDK RVSVEDIKRLQVRNKYDKLMFLDALVEI TETKSPSSISRYNRQSVTVLAEPNRN AGVSLGEILTQVSKNTKEWLVEGANYSR FTGEADNAKESNGEFLVALATAFVLIY MILAALYESILEPFIIMVTMPLSFSGAFF ALGLVHQPLSMFMSMIGLILLIGMVGNKNA TLIDVANEERKKGLNIQEA

HP0028	1941	TTTAGAGGTGCTTACCCAAAGCTAAAGCATCGCTTTTGATAAAACCGGCACCTTTGACTAAAGCGGTTTTTAAAGTAAC GGATATTGTGCCGCAAAATGGGCATTCTAAAGAAAGAGTTTTCGATTACGCTTCTTGTCGAGCTCTTATCCACGCA CCCTATCGCTTTATCCATTCAAAAGCATGCGAAGAAATGTTAAAGGACGATAAGCACCACATGACATTAAATAA CGAAGAAGTGAGCGGGATGGGGTTAAAGCGCAATGCCATACGGATTAAATCATCGCAGGGAATGAAAAAATGCTC GATCAATCCCATATCGGCACAGCCCTTCCAAAGAAACGGCAGCATGTCATGTCGCTTCAATCAAACTTATGT GGCTATATCGTCAATTAGCGATGAGATTAAAGATGACGCCATAGAGTCTTAAAGGATTAAAGTGCAAGGGATAG AAATTTTTCATTTGAGCGGGACAGAAAGAGCGGACTGAGAGCATCGCTCAAAACCTAGGCTGTGAATACCAT CGAGCTTGTTCCTGAAGAAAACAGCGGTGTTTAAACCTTAAAGAACGCTATAAGCTCCGGGATTTTGTGTA GGCATGGCATCAATGACGCTCCGACTCTAGCGAGTGTGAGGATTGGCATGGGAAAGGATCAGAAATTGA GCAAGCAAGCGCAGACATTGTGATCACCAATGACTCTTAAATCGTTAGTGAAGTTTAGCGATCGCTAAAAAA CTAAAGCATTTATTGGCAAAATATCTTGTTCGCTTAAAGGATTAAAGCCGTTTATCGTGTAGGCTTATGGGG TAGCGAGCTTGTGGGAAGCGGTCTTGGCGATGTGGGGTTACGCTTTAGCCTTAGCCAATTCATCGCGCGGAT GAGAGCTTAAAGCCTTGATCGTATCATAGCCATTAGCAATTTAGAAAGGGGGCAAAATGCATAAAATAGAGCGCTTACTCCA AACTCTAGCGCCTAAGGGG	1942	LEVLTOAKSIAFDKGTGLTKGVFKVTDI VPQNGHSKEEVLHYASCSQLSTHPIA LSIQKACEEMLKDDKHQHDIKNYEEVS GMGVKAQCHTDLIAGNEKMLDQFHIA HSPSKENGTVHVAFNQTYVGVIVSDE IKDDAIECLRDLKVQGIENFCILSGDRK SATESIAQTLGCEYHASLLPEEKTSVFK TFKERYKAPAFVGDGINDAPTASADV GIGMGKSELSKQSAADIVITNDSLNSLV KVLAIKTKSIWQNLFALGIKAVFIVL GLMGVASLWEAVFGDVGVTLLALANS MRAMRA
HP0028	1943	GAGTATTCTGATTTAGATCGGCTGTGAGAGTGAATTTAAGAAACAGCGGGCGGTGGATAGAGATGGC GAAACCTTTTAGTCAAAATCCAAACCGCTCTTTGAGTTTAAAGACATTTGGCAAAATCACCGTTCCACTAATTTAG GGCATTGACATTAGGATTTTGCAGAAATCATCAGCCAGTCTCGACCCGTTTGGGTTTGTACTAAAGATGGC GTGGCGAGACACAGAGGCTTGGTCTTCTTAAAGACGCTAACACCAAGAAATCATCACTCAAGTGATCA AAACTAGAAATTAACCCCTTTTACCGAATGGGTGCTCAATATGTTTATGATCGCTCAGAAATTACGCAA AAAGCCATTGCCACCGTTTCTAAACCCCTCATTGAAGCGTGTGTTTAAATCATCATCAGCTCTTTTATTTTAGGGA ATTGAGGGCGAGCGGTGCTGGGGTGATTTTACCTTAAAGCTGT	1944	SISDLESVRNLRNSGAGRVRDRGE TFLVKIQTASLSLEDIGKITVSTNLGHLH IKDFAKVISQSRTRLRFVTKDGVGETTE GLVLSLKDANTKEITQVYQKLEELKPF LPNGVSINVFYDRSEFTQKAIATVSKTLI EAVVLIITLFLFLGNLRASVAVGVILPLS
HP0028	1945	ATGGCGGATGGATGGCGCATCTAAATTCGTAAGGCGATCGGCTCTATCATCATCAGCTTATCAATATC ATTGGAGGGTTTTAGTGGCGGTGTTCAAGGGATAGAGCTTACGCTTAGCGTAGCACTTCACTATCTTAAACC ATTGGCGATGGCTTGTGGGCAATCCCTGCCTTAATCATTTGCGACAGCGGATTTGCGCACTCGCACC CGCAAAATGAAGAAGAGGACTTGTCTTCCAACTCATCACAGCTCACCAATAAAGCAAACTTAGTGATTTGG GAGCGATTTATTGCTTTTGCACCATTCCTGGACTCCCTACCTTTTCTTAGCGTTTGTAGGGACTCTCTTTTATT CATCGCATGGCTGATTAGCAGGGAGGGAAAGACGGGCTGCTCACTAAATTAGAAAATTTATTGAGTCAAAAATTCG GCTTGGATTGAGCGAAACCCACAGCTCCAAATCAAAACCCACACCCCAAGGCTAAACCCCAAGAA GAGCTTAAAGAGAAGAGCAAGCGATTGATGAAGTGTAAATTTAGAACTGGCTTTAGGCTATCAA CTCATCAGCTTTCGGACATGAACAAGGGGGGATTGT	1946	GAMDGASKFVKGDIAISIITLINIIGGFL VGVFQRMDSLSFSASTFTILTIGDGLVG QIPALIAATGIVATRTTQNEEEDFASK LITLQTNKSKTLVIVGAILLFFATIPGLPT FSLAFVGTFLFLFIWLISREGKDGLLTK LENYLSQKFGLDLSEKPHSSKIKPHPTPT TRAKTQEELKREEEQADEVLKIEFLEL ALGYQLISLADMKGQGGDL
HP0028	1947	TGCAAGCCTTGATGAAAACGCCCAAAACCGCCTTAAATGCAAAATACCAAGATTGAAGTTTAGTGATA GCATTGTGGTGGGGATATTCTAAAGTCTCCCTGGAAGCGGATTTGCGGTGGATGGTGAATCATAGAGGGCA AGGGGAATTAGATGAGAGCATTTGAGCGGCGAAGCGTTGCCGTTTATAAAAAAGTCGGCGATAAAGTCTTTTCAG GGACATTCAATAGCCACACGAGTTTTTAAAGAGCCACGCAAAACCAAAACAGCACCTTGTCTCAAATTATAG AAATGATTATAACGCTCAAAGTTCAAAGGCAGAGATTCTCGCTTAGCGGATAAGGTTCAAGCGTTTGTGCGCAA GCGTGATCGCTATTCTATTAGCGTTTGTGGTGTGCTCATATTGCACCTAAGCCGATTTTGGTGGAATTTTG GAATCGCTTAGAAGTGTGTATCGGTTTTAGTGATTTCTTGCCTTAGGCTTAGGATTGGCTAGCCCTATGAGCA TTTAGTAGCGAACAGAAACGAGTTCTTTAGGGTTATTTTAAAGACGCTAAAGTTAGAAAAAGCAAGGCTAG TCAATACGATCGTTTGTATAAAACCGCACGCTCACTAACGGCAAGCTGTGTTAAAGCGTTCTATTCTAAGATAG AATTATTAGAGTTATTGAGTTTAGCGCTCAGTATTGAAAAGAGTAGCGAACATGTCTAGCAAGGGATTGTAGAAAT	1948	QALMKNAPKTKALKMNNQIQIEVLVDSI VVGDIKVLPGSAIAVDGEIEGEGELD ESMLSGEALPVYKKGDKVFSGTFNS HTSFLMKATQNNKNSTLSQIEMINYNAQ SSKAEISRLADKVVSVFVPSVIAISILAF VWLIAPKPDFWWNFGIALEVFVSVLV ISCPALGLATPMSILVANQKASSLGLF FKDAKSLEKARLVNTIVFDKGTGLTNGK PVVKSVMHSKIELLELLSLSIEKSSEHV IAKGIVE

HP0028	1949	CCACAGAGGTAGACACCTTAAAGAAAGGTAAGTCATGGTCATCATGAAGTATTAAGATGAGCTTTT AAAAGAGTCTGAATATTAGCGCACGCCACTTGGCGGTGTGCCATATGTTCACCCCTATGCCCTTTAGAAATTG ATACCGGAAAGATCGCTCTAAATATTATCAAAAACCCCTAAAGCGAAAGATCGCTTCAAGATCCTTAATCACA TGCAACAACCAAGCATGGCTGTTTTCTTTAAAGCGCTCGCTAGTTCAAAACCTCATAGGCTCTCACAAC TAGTGAGCCTAACCAAGGATTAAAAATTCATCAAGCCTTCCCTAAAGCCTTTTATACATGCCCAAAACAAACG CCTATCCTTTAGAAAATAAACGCTTAAGAGCGGATAAAGATGCTTCAAGAGTGTTCGCGGAAAGCCTTATCAATTACCCGACTTGCATCAACCGCTCGTTCCG CTCCATCAACAATAATGGCGGATAAAGATGCTTCAAGAGTGTTCGCGGAAAGCCTTATCAATTACCCGACTTGCATCAACCGCTCGTTCCG TAATGTATCCTAACGGATTGAATGGCTTTTCTACAATTAAGCGGATAAAGGATTTGAAAGTCTATGATTTAGCGTCTATATTGAAGAGTTCT ACGAAAAAACCATGGGATTTTCAAGCAATGAAGCTTATAAGGATTTGAAAGTCTATGATTTAGCGTCTATATTGAAGAGTTCT CGACGCTTTTCAAGCAATGAAGCTTATAAGGATTTGAAAGTCTATGATTTAGCGTCTATATTGAAGAGTTCT AAGCCCTAAATTAATCAACCCCTTAACGAAGACATAGGTTATACACGATGTGCGCTTTAAGTTAGAAAATAA AGAAGAGTTGTTGTTCAATCTGGCTAAATAATGCACCTTAGCGGAGATTGTTATCCATAAAGAGACGGGTTGTTGCG GCTTTGCGGGGAATAAGGGCTTTTACTCCTGAATTAAGAGAGAGCGCTTTAAACGGCTTTCAAGCGCTTTTACCAAT CCTATGACCTT	1950	HREVEHLKERVSHGHIEDQVLLDELL KESEYLAHATCAVCHMCSTLCPLEIDT GKIALNYQKNPKGEK/ASKILNHMQTT TSMARFSLKSARLVQNLIGSHNLVSLT KGKKFKFPKAFYMFKNNAAYPLENK TLKSEKVIYFSTCINRSFAPSNMADK RCIQEVFESLCQKAKVSVMPNGLNAL CCGKAFINYDLTKQNNKHNHAFQLS DKGKIPVLDHSACSTHF/KQMKAYKD LKVYDLSVYIEEVLSPKLKFNPINEDIGL YTMCAALKLENKEELLFNLAKKCTLGEIV IHKETGCCGFAGNKGFFTPELNESALN GFOAFYQSYDLKRGFS/TSSTCEIGLSE KTRFSWQHIAYLVDACL
HP0028	1951	GCGTGCTTTAGAAAATAGCGACAAAAAATTGAAAAATGAAGATAAAGACGCTAAAGAAATCAACCGCTTTTCTA ACACCTCTTTTATCCAGCGTGATAGTATTTACACACCTTGCTTTTCACTAAGATCCTCAAGGTTTGAAGCCTT AATTGATTGAGAAATCGGCACATAAAACCCCTTAGGTTTCACTTCCCTTAAATGAAGCGAATTTGCATGGCTATAT GGCCCTAAGGATTACCGCTCTTTGAAAGCGATTACCCCATGCTCACCGATGTAGATAGATGGCTTAATCAGCTTTC TTTGCAAAAGCGGTGTTTGTACTGGATTATTTGATCAATTCGTGGCAATTGGGTTGGGCTATCATCTTTTAA CGATTATCGTGCGCATCTCTTTATCCTTTAAGCTATAAGGGCATGTGAGCATGCAAAAGCTCAAGAAATAGCCCC CTAAATGAAAGAACTCCAGAAAAATACAAAGGCGAAACCCCAAAATTGCAAGCCACATGATGACGCTTTACAAA AAACATGGGGCTAACCCACTAGGGGTTGCTGCCCTTAATCTTACAAATCCCGGTGTTTTTGGCATT	1952	VLENSDKKIEKIEDKDAKEIKRFSNTLF LSSVDRYFTLLFTKDPQGFALIDSEI GTKNPLGFISLKNANLHGYIGPKDYR SLKAISPM/LDVIEYGLITFFAKGVFVLL DYLQYFVGNWGWAILLTIIVRIILYPLSY KGMVSMQKLKELAPKMKELQEKYKGE PQKLQAHMMQLYKKG/ANPLGGCLPL ILQIPVFFAI
HP0028	1953	AGACAACAGCGCCGCTTAGACAACACCCCTAAAAAATCATGCATGATCGTTTTGAAAGCGCGCACCTTTGAGCG CGTTTTAGAAAACTAGAAAACTAACGCAAGGTTTTGCGGTTTGGTGCTGGATAAAGAAAAAAGTTCTGG CCCTAGCGTTTTATATGAAGATCAAGGCTATTTTTACCTTAGAAGAGCGGTTATTTCCGCTTTTCTTTAGAGTT TTTGCAAAACGCTTTTTTAAATGTTACAGCATGGCAATCATTTAGGCGATGATTTAAACCTTGTGAGCTTTTA AAAGCCAAATACAGGTGCTTTAGAAAAACATTCGCATCCAGACACTCAAAATTTAGCGTTTTTAAAAATCCGGA AAAGTGGGTTGATGAAGTTTAAAGGAATATTAAAGAAATTTAAAGAAAGAAATTTAGCGATGAAAAATCAAGATTTAAGA CTAAGCGGAGAAATTGGAATTTTAAAGCGTGAATTAACGCTTTAAAGCGTTTGTGTAATTTTGAAGAGGGG GATTGGAAGAAACTTGCCTTTCTTGGCCAGAGAAATTAAGACCGCTTTAAGAGTTTAAATGGCATGGAGTTTC AAGGCTTTAAGATTGATGCGCTTATTTCAAGCGCTTAGAGCAGGAGTTAAGAAATGAATGCTGTTTATGAGCGCC AAATTTTGAAGTAAATGGCGTGATTTTAACTCAATTCGCCCAAGCACTTAGCGAAGTCTTGTATGATAAATTAG GGCTTCTTAAACAAAGCCATTCTACCGATGAAAAAGCCTGTTAAAAATCCTAGACAAGCATCCAAAGCATCGCTT TGATTTAGATAACAGAGAAATTGAACAAGCTTTTAAACACTTATACCCCTTATTGCGCTAAAGACAAAGACG ATAAATCCATACCCTTTTATCCAAACCGGCACAGCTACCGGGGCTTTAAGCTCGCATTCGCCCTAATTTGCAAAATA TCCCAGTG	1954	DNTPALDNTPKKSCMIVLESAAPLSAFL EKLEKTARVFAFLVLDKEKVLALAF YEDQGYFLPLEEALFSPFSLEFLQNAF FKMLQHAQIIGHDLKPLLSFLKAKYQVP LENIRIQDTQILAF/LKNPE/KVGFDEVK EYLKEELIPHEKIKDFKTKAEKLELLSVE LNALKRLCEYFEKGGLEENLLSLAREIE TPFMKVLGMMEFQGFQKIDAPYFKRLE QEFKNELHVLERQILELIGVDFNLNSPK QLSEVLYDKLGLPKNKS/HSTDEKSLKI LDKHPISALILEYRELNLKLFNTYTTPLR LKDKDDKIHTTFIQTGTATGRLSSHSPN LQNPVRSRPGLLIRKGF/ASSKEYCCLL GVDYSQIELRLLAHFSQDKDLMEAFK GRDIHLETSKALFGEYLAKEKRSIAKSI NFGLVYGMGSKKLSET/NISLNEAKSYI EAYFKRFP/SIKDYLNRM/KEEILKTSKAF TLLGRYRVFDFGTGAND/VKGNLYLREG VNAIQGSASDLLKLGMLKVSERFKNN

HP0028	1955	TAAATCGCACTAGATGGCGTCTTTTAAATAATGCGAGCGTGGATCGCTCTTTGATCAGTGGGAGTTTAAGCCCTT TGGAATTGGGGTTAATGATCCAAATTTAGGGGTTATGTGAATGTGGCGTGCCCTTTTAGCTATCAAGTGAGCGCT AATTTTCAAAACTACGCCCTTCTGGTTTGTAGAAACTTTAAAAAGAGTTTTTTAGAAAAGCCCTTAATTGAGAGTA GCGGAATCAAAATTCGGGATATTTTCTAAAGCGGTGTTTGTAGCCCTTTGTAAGCTTTTTGTTATGGCAATTTGG TTTGGGGGTAATTTGAAAAAGCCCTTAATGGTGTATTAGCGTGCTAGTCATCAGCTGCCCTTGGCGGTTTCGCTC TGCTACGCCCATTTGCTTAGTGATAGGGGTGTTTAAAAACCCCTTTGATCGTGTAAAGAAAGCGGTTGTTTTAGAAA CTCTGGCTAAAGTGAAAAAATCTTTATAGACAAAACCGGCACGCTACGCAAAAAGAAAGTCCCTTTTAAAAAGAAAAA TCATTTATGAAGAAATTTGATGAAGGCTTTTGAAGAGCCCTTTTAAAGTGAGAGAGCATTTAGCCCATAGCGCGATTC TTAAATCTCTAGATGGCGATGAGGTAGTTTGTAGAAAAGATAGAGTTTTTCCCTCATGGTCTGAAAGCGAGCTATCAAA ACGAAACCCCTGCTAGTGGGAGTTTGAATTTTGGGATCTATGGGGTGATATACCAATGAAAGAGAGCGCTAAT ATCATGGTAGGCTTTCGAAAAATGAGACTTTATGCGGTTATTCATTTTAGAAGAGCGTTTGAAGCTAACGCTAAA GAAGTCGTTACGCGCTTACAAAAATAAGGCTTAGAATTAGAGATTTAAGCGGGGATAATGAAAGCTCGGTTAAGGA GTGCGCGAAAAAATTAGGGATTTCTAATTATCATGCCCATTTGACCCCTGAAGATAAGGCTCAAACCATCAGCTCTTA TAAGGGCGTTTGC	1956	KIALDGVLLNNASVDASLSIGFEKPLEL GVNDPILGGYVNVGVFPFSYQVVSANFQ NSRLSGLLETLKKSFLKPLESSANQI ADIFSKAVLFLAFVSFLLWQFGLGDNF EKALMVCISVLVISCPCAFALATPIALVI GVFKNPLVFKALFLETAKVKKIFIDK TGTLTQKEVLLKEKIYEEDGRLLKSL KVREHLAHSAILKSLDGDDEVSLKIEFF AHGLKASYQNETLLVGSLLKFLGSMGV DIPMKESANIMVGFAKNETLCAFILEE RLKANAKEVQALQNKGLELEILSGDN ESSVKECAKKLGISNYHAHLTPEDKAQ TISSYKGVCAAMVGDGNNDALALKAQAS VSLGFEKSALSKSACDILLLEEDLSLK KAFDNAQKVYQVWLQNLVLSLIYNAILIP VAMLGYINPLIASLSMSASLLVVLNSL RLKRS	1957	TCAGCAAGGTAAAGAAGAAATTTCCGGTGCAATTCGCTGGCATTAGACTTTAGAAAGAAACGGCGCGCTAAAGACT TGATTTCAAGATCCGCTCATTTGCAGATGATGCGGTGGATGAAGAACACACAATAAGATCGGATGAAATGACGGAT TTAGAGGCTCAAAAATTAGGCAGCGTGTGTTGCTGATGTGGAATGGGGGTAAATCTTGCTCAAAGCGATCCC CATTTAGATGGCGAATGCTTACAGATCGCAAGTGGTGATGACCAAAACACCGCCGTTGGTGAGCTTCACGC TGGATCGCAAGGGCTAAGATTTTGGGATTTCTCAGGTGCGAATGTGGGCAACCGCATGGCGATTGTTTTAGA CAATAAGTCTATTACGCCCGGTGATTAGGAGCGTATCGGTGGGGAGCGGCGAGATTAGCGGAAATTTAG CGTGCTCAAGCGAGGATTTAGCGATCGCTTAAAGAGTGGGCGATGAGCGCTCCCATTCAGGTTTAGAAAAA AGAAATTAGGCCCAAGTTAGGGAAGACAGCGTTAAACCTCCATTATCGCTAGTTGGGGCTTTATTTAGTG ATGGGCTTTATGGTCTTTATCTATGCGGGGTGATCGCTGTTGGCGTTAGTGGTCAATCTTTTGTGATT GTGGCGTATGCGGATTTTGGAGCGACGCTGACTTACCGGGAATGGCGGATTTTAAACCGTGGGGATTG CCGTGGATGCTAATATCATCAACGAGCGCATTAGAGAACTTAAAGAGAGATGAGGGCATCGCTAAAGCGGATC CATTTAGGCTATATCAATGCGAGCGGGC	1958	QQGKEEISVQLPGIKTLEEERRAKDLIS RSAHLQMMMAVDEEHNKDAMKMTDLE AQKLSVLLSDVEMGGKILLKAIPILDG EMLTDAKVYDQNNQPWVSFTLDAQG AKIFGDFSGANVGKRMALVLDNKVYSA PVIRERIGGGSGQISGNFSVAQASDLAI ALRSGAMSAPIQVLEKRIIGPSLGKDSV KTSIALVGGFILVMGFMVLYYSMAGVI ACLALVNLFLIVAVMAIFGATLTLPGM AGVLTVGIAVDANIINERIREVLENEG IAKAIHLGYINASR	1959	GGAGCATTTGGATAAAGTGATTTATTAGATCAAGCCCCCATAGGCAAAAACCCACGAACCCCTGCCACTTACA CGGGAGTGATGATGAATCAGGATTTTATTTGCCGAGCAAAAAGAGCTAAATTTTAGGCTATAGTGGAGCCGT TTTAGCTTTAATGTTAAAGGAGGCGGTGCGAGAAATGCCAAGCGCATGGGACATTAATAATAGAAATGCACTTTT GCCTGATGTGTTAGTCCAATGCGATAGCTGTAAAGGCGCTAAATACAAACCCCAACCTTAGAAATCAAGGTGAAAG GCAATCCATTGCCGATGTGTTGAACATGAGCGTGAAGAGGCTTATGAATTTTGTCTAAATCCCTAAATCGCCG TGAAGTTAAAAACGCTTATGGATGTGGCTTAGGCTATATACCTTAGGGCAACAGCTACGACTTTAAGTGGGGG GAGGCTCAAGGATCAAAATAGCTAAAGAAATGAGTAAAAAGACACAGCAACCCCTTATATTTTAGATGAGCCT ACTACCGGTTTGCAATTTGAAGACGTGAATCATCTTTTACAACTCTTGCAATCTTTAGTGGGTTAGGCAATCTATGC TAGTGATTGAGCATAATTTAGACATTTATCAAAAACGCTGACTACATTTAGACATGGGCGCTGATGGGGGATAAG GGCGGAAAGTCAATTCGAGCGGCGACGCTTTAGAGGTGGCGCAAAATTCGAAAAAACCCAAAGCTACACGGGA AAATTTAGCTTGGCAATTAAGATCTTGCA
HP0028	1957		1958							
HP0821	1959		1960							

HP0821	1961	1961	1962	1962	LKIAKECLEMIENKDRLIKELKMERLS NNLRFEEALYRDRIAKIQKIAPFTCMDL AKLYDLDFAFYGASNKAVLVKMFMRG GKIISAFEKIHSLNGFDTDE/AMKQAIIN HYQSHPLMPEQILLNACSNETLKELO EFISHQYSKKIALSIPKKGDKIALIEIAM KNAQEIFSQEKTSNEDLILEEARSLFKL ECMPYRVEIFDTSNEDLILEEARSLFKL YENNAFQKNSYRRYHLLKGSJEYQMS ELLTRRALDFAKEPPPNLWVDDGGRAQ LNIALEILKSSGSFVEVIAISKEKRDSKA YRSKGGAKDIIHTPSDTFKLL ² SDKRLQ WVQKL RDESHRYAINFHRSTKLKNMK QIALLEKEGIGEAASVKLLDYF:GSFEAIE KASEQEKNAVLKKRI
HP0821	1963	1963	1964	1964	LVEYGFRLPSALDNRPLKFEDEFIHKNC QFLFVSATPNKLELELSKKNVAEQIIRP TGLLDPKFEVRSDSKQVQDL ² DEIKLV VARGERVLTTLTKMAEELCKYYAEW GLKARYMHSEIDAERNHIIRSLRKEF DILIGINLLREGDLPEVSLVAIVIDADKE GFLRSETSLIQTMGRAARNANGKVLLY AKKITQSMQKAFETSYYRRAKQEEFNKI HNITPKTVTRALEEELKLRDDE:IRIAKAL KKDKMPKSEREKIIEKELDKKMIRECTKN LDFFEEAMRLRDEIAQLRTL
HP0821	1965	1965	1966	1966	GLKKVFKDSKKDACGFIYEISEFIMKAYT ALLKKQDRYVYLLRYLPSRYWASILTTA LYVKYPDFDALKKLLVSYYYQIWIAGG TITRIKQTSINIKNVKSNSKSVETIKELILN SIDSYNFTDQYLYNLWDSSSVYHSHKW VRPVLALANYFMADEEKPHFIAMDAET QVEHILPQTPKRGSQWNADFIJKEKRE EWNINIANLTLLKRKKNHAHALNGDFDE KRKIYGGKDTSKVISCYDITKELYSNYR KWNEKSLQERYKSLYNTITPVLHIE

HP0389	1967	AATTGTGCTTCACGCTTATAACGCTGTGGCGATAGCGTGCTGACTTCTACAGGTATCATTATCCATGTAGGGACTA TGGGATCAGCTATCAATACATGGTAGAGAAATATGGGAAGATAACCCAGGCATCAATGACAAGGATATTTTACCA ATAACGACTGCGGATGGGAATGTGACCCATGCGATATATGACTCTTGTGCTATTTCCACGATGAAAAATTGA TTGGGTGGGTAGCGCGCTTACGCTATGATGATACCGGTTGCTTACTCCAGGATCGATGAGCACTGGACAGGT TCAAGATTTGGGATGGATACATGATCACTTGGCTAAGACAGGAGCGAATGATGAAAGCTTTAAAGATTGGTTGC ATGAATCTCAAGATCGGTTGCGACGCTAAATATTGGATTCTAGATGAAAGGACTAGGATTGCAGGATGCCATATG ATTAGGATTTAGTGATGGAAGTCATTAAGAAAGACGCGCATGATCTTACATGCGATTATTGATGAGGTGATTGAA GAGGGGAGAAAGAGCGCTTATCTAGGATTAATCCATGACCATACCCAGGCAAGTATAGAAAGGTAGCGGTTTGTGGA TGTGCTTATGCGCATAGGATATTGGCG	1968	LCFTLYNAVGDVLTSTGIIHVGTMGS AIKYMVENNWNEDNPGINDKIDFTNNDC AIGNVHPCDIMTLVPIFHDEKLIGWVG VTHVIDTGSVTPGSMSTGQVQRFQDG YMITCRKTGANDESFKDWLHESQSV RTPKYWILDERTRIAGCHMIRDLVMEV KEDGIDSYMRFIDEVIEEGRRLISRIKS MTIPGKYRKVAFVDVPYAHKDIG
HP0389	1969	CTAAAAATATTAGAGGCGCGCTTATGAGGTCAATTAACACACCTTTCTAACACATGAGATTTTAGACAAATA CATAGAGACTAACACGCGCTGTGTTTGGATCAAAAAGACGATATTTTCTGCTACGATTTTAAAGGCATTTGGG TTATGAGTGTGAGCGAAATGAGCGGATAGATTGTGCGCTAAAAAGGCGATTTGAATGTTTATCAGTTTCGT GGCTTTAGCGATAGCTGCAAGAACCGCGTAGGGTGGCGTGAAGTGGTTTGTGCTAATGAGAGCGGTGGAT TCTTTGAGTTTATAGCGATCGGCTAATTTGAGCGGAAAGGAGCGTATGACATGCTTGGTATTGTTGACAAA CACCCCTATTGAAACGCTTATATGCGCATGATTGGTAGGCGACCCATTTATGCGCTCTTACCCGCTCAAGG CGATGAATTCGCCCAATGATGAAGTGAATAAATTTTGGTAAAGATACCGAGAGTGGTGGTAAAGAGCAGA GAGACAGCGCAAGTGGATGAAAAGACACTTTCAATTTGCAAAAATTTGGCTAAGACAGG	1970	KKYLEGSAYEVYNNHLSYKHEILDKYIET NTAVFWIKDDIFSVATILRHLGYECLS EMSAIDLCAKKGHFELFYQFVGFSDSC KNRRRVKCVLLPNESVDSLSFLYRS ANWSEREAYDMLGIVFDKHPYLKRLIM PHDWVGHPLLRSLYPLKGDFAQWYEV DKIFGKEYREVWGKEQDRDSARVDEKD TFNFAKIGYEQ
HP0389	1971	GGATGCAATCCCTGAGAGGATTAAGAAAATCAAGCAATGAACAAATGGATGCGCTCAACCAACATTTGGCTTTA TCCCGTGCAAGCGGATCACAATGTGCTTACCTACTTAACCTAACACGCTCTTTCGTCGCGCTCAATGACGTTT TGAGCTATGAGGAGCGGAGTATTTACCCAGCACTTTGACACGGTGAAGCAGGAGCGCTACACCTATAAGGA TAAATTCAGCTTCAATCGGACTACTTCAGGATTTGGCGCGGATTTGCCACGGCGAGTATTCAGTCTATACAA CGGTCCTCATGAAGGTAATGTGGCGGCTTCAATGCTATCTCAAGCGGTGAGCTGGAATGTTATACAGGCC TATTAGAGGTTGCAATCCATGCGCTTTCAACTACATGACATCTGTAACCAAGCTGCGCTTTAACCGACTT GAACGGGATGTCTAAAGGAGTACTGATAACCAAGCAATTTCCCTTTTGAAGCCCTTCCAAATTCATCTTGACGC TCGTTACAATGGCGTAACCAACCATCGTATTTCTAGCTATTTTACAGCCGCTTATAGCGGATAGCAACAG TGACGAGGAGGCTATTATGGGATGCAATATATAGTGGGGGGAACCAACTATGAAGCGTCTTAAATAGCGGTATC AATGCGAAGCTTGGTGTATGACCAACATGAAGGCTCTTCCCTTGGTATGGGTGGAATATCAAGTGAAGCA ATTTCTGGGAAACGGGAGACACAGATGACAGGAGCTTGCATTAATCAATATCTTCAACATGAAGTATTTT ACAGGATTTGCTAGCCCTGAGGCTTGCACCTGCGCTGGAAGTCTGTTACAGCGTATTTGAACTACACTT CTAAAGGCTTTAAAGGAGGCGGTTATTGCGGATGATGAGCGGCTCAAAATTAGCCGCTTAGCGATTTATTGAAA TGATGAATCTTCAATTA	1972	MQIPEKDLRKIKHMNNWMPSTNIGFIP VQGDHNLTYFNQYQSFVPPQLDVL YGAAYFTQHFDTVEAGARYTYKDKF SFNADYFIWARDFATGQYSVYTSGP MKGNVRPINGYSQGVLELELYRPIRGL QFHAAFNIDTRVTSHGPLTDLNGDVL KGTSYNKHFFPVSFPQFILDARYNWRK TTIGISSYFYSRAYSIGSISNAAGGYG MQYSGGNNYESVLNSGYQCEAWCM TQHEGLLPWYWWNIQVSQIFWENGR HRVTGSLQINNIFNMKYFTGIGSSPA GLQAPAGRSVTAYLNYTF
HP0268	1973	ACTTCTTAAACAAGCTCATTACACAGGGCAATCATTCTGATAGGGTTCGTGTGTTTGAATACGATTCTA AAGATGTTTATACGCTGTATCAATAAAGCCGTAAGTGCCTGTACCATTTTATCAGGGGATGATTATCAAA AACAAGACATCAATAATGTTCTACCGCTTGTAAAGTGGTATGAAACGATAAATTTGATCCGTTTGCCTC ATTAGACGCCAATCAAGAAATGGAATTTGACTTGAAGATCCTCAAGGCAAGTTATCTTTAGCGGGTAAAAAGCT CACTTCAAGAAAGATTAAAGAGCTTAAAGAAAACCATTTAGAATGGGTGAATACCCCTATGGATATTTACTCAATCG CGATTTAGCTGAGCCTGTTATGGTAGGGAAGAGTCTTATGGACATGCTCACTCAGCTAGATAAAACAAATTAGA AAAAATCCACGATTTAGCGGTGCAAGAAATTTGATCATCAACGATCTGGCTAGGGCATGACGCTTCCATTATCC AATCTTTTACGCCGATTCTGAGTCTTGAATTTACTCAAGCAACCCGAAATTTGATGATGAAACGCTCTAGCGG CGATTCGTATCCATAAGTTATGAACACGCGATCCGTTACGACTGAAGTGGCTAAGCAGTTTGTCAAAAACCTTT TCTTTGATCCAGAACGCTATGATTGACCATGGTGGCGCATGAAATGAATCAACAGTTAGGCTTGCATGTGCTT GATTACATTACGACTTTAAGCGCATGAAGATATTATCACCACTGTTAAATACCTCATGAAGATCAAAAACAA AGTCGCCAAATACAAATATGATGTTGCAATTAATCTCTCACAGGGGAATACCCCAAAATCAAGATGAAAGCTT GGAATTTGAATGGAATTCGCGCA	1974	TSLNKLYTGQIIPDRGSWLYFEYDSKD VLYARINKRRKVPVTLFRAMDYQKQDI IKMFYPLVKVRYENDKYLIPFASLDANQ RMEFDLQPKQGVLLAGKLTSRKIKE LKENHLEWVEYPMIDILLNRHLAEPVMV GKEVLLDMLTQLDKNKLEKIHDLGVQE FVIINDLALGHDAISIQSFSADSESLKL KQTEKIDDENALAAIRHKVMKPGDPVT TEVAKQFVKLFFDPERYDLTMVGRM KMNHKLGLHVPDYITLTTHEDIITVKYL MKIKN VAKYKYVDVCKLLLTGELPKNQDESLE FELELR
HP1236	1975	AGTCGCCAAATACAAATATGATGTTGCAATTAATCTCTCACAGGGGAATACCCCAAAATCAAGATGAAAGCTT GGAATTTGAATGGAATTCGCGCA	1976	VAKYKYVDVCKLLLTGELPKNQDESLE FELELR

HP1236	1977	<p>GCAAAAAAGTAAAAAATAATTAGCACTAGCGCATGGGTGTTGAAAAAGCATGAAAAATAGACAAACCCAT TCTAACGCCACAAAACATCAAAAAGATTTGCACATTCGATCTAAATTTCTCCTTAGGCAAGCAATCAATCACGCTT GTTAGCCTTTAAGCTATAACCTTTTTTGATATAAGCCTACTCAAAATCACCCCACTCACCGGCGCACGCACCA GATCCGCTTGCAATTAAGCAGCGTGATCATAGGATCGTGGTGAGGGCTTTATGGGTGGCAGATGAAAAACGCT AGGAGTATCTCAATTAAGCGTGAAAAATAAGCCCACTTACTCATGCTCCATGCCCTAGTTAGAGTTTGAATTT AAAGGAGCGATCTATAAATCGCTCCCAATGCTGAACGCTTATGCCCTTTTAAAGATCTATCCTTTTTTAT GATTGATCTTTTGGTTGCTCTTCTGGGTTTGGTTGAGGTGCGCTATATGTTCTTGTATGGTTTTTCTCCACCCAC AGGAGCGTTTTTAAACTCTTTTGAATCTTGGCTGATTTTAAACAAAGCTATCGTTAAATGCTGTTGTAGCTGTTTT TGAGGTTTTCTTCACTTCTGTTGATGTTTCAAAATTTCTTTTTGAATCATCTCTGTTGAGGCCATT</p> <p>1978</p> <p>QKKVKKTYLALAHGLVEKSMKIDKPILT PQNIQKDLHIRSKISPLGKQSITLVEPLS YNPFLDISLLKITPLTGRTHQIRLHLSSV DHRIVGEGLYGVADEN/AREYLQKRE NNAPLLMLHAASLEFEFKGAIYKIASPM PERFMPFLKDLSEFF</p>	1978	<p>VMGTGKKHGVGLYYFNPCLKIPTKSL ECGEIGNVSLGLKSVTDIAVGDTLTDAK NPSTKPIEGFMPAKPFV/FAGLYPIETDR FEDLREALKLQINDCALNFEPESSVA LGFGFRVGLGLHMEI/IKERLEREF LNLIATPTVVEVHLTDNSIKYVQNPS ELPPENCIAIKEPFVRATITPTSEFLGN LMQLNNKRGIQEKME/LNQSRVMLT YSLPSNEIVMDFYDKLKSCCTKGYASFD YEPIENREANLV</p> <p>1980</p> <p>GADEVFCIGDIFLTGGELGALCLDISIAR HIQGVLGNAQSLENES/FENHYLEAPNF ANAVFKSKEINKIPAPLE/YSKGNHAKIK QLKLDLSKLRTKIFYRLDLFKQHK</p>	1980	<p>LLNLEIPRRAQVIRTILLNRMISHIFFI SVHALDVGAMSVFLYAFKTRREYGLDL MEDYCGARLTHNAIRIGGVPLDLPNNW LEGLKFLGEMRECKKLIQGLLDKNRI WRMRLENVGVWTKMAQSWGMSGIM LRGTGIAYDIRKEEPEYELKELDFDVPV GNYGDSYDRYCLYMLEIDESVRIEQLI PMYAKTDTPIMAQNPHYISAPKEDIMT QNYALMQHFVLVAQGI/RPPVGEVYAP TESPKGELGFFHSEGE/EPYHRLKIRAP SFYHIGALSDILVGQYLADAVTVIGSTN AVFGEVDR</p> <p>1982</p> <p>LLNLEIPRRAQVIRTILLNRMISHIFFI SVHALDVGAMSVFLYAFKTRREYGLDL MEDYCGARLTHNAIRIGGVPLDLPNNW LEGLKFLGEMRECKKLIQGLLDKNRI WRMRLENVGVWTKMAQSWGMSGIM LRGTGIAYDIRKEEPEYELKELDFDVPV GNYGDSYDRYCLYMLEIDESVRIEQLI PMYAKTDTPIMAQNPHYISAPKEDIMT QNYALMQHFVLVAQGI/RPPVGEVYAP TESPKGELGFFHSEGE/EPYHRLKIRAP SFYHIGALSDILVGQYLADAVTVIGSTN AVFGEVDR</p> <p>1984</p> <p>LLNLEIPRRAQVIRTILLNRMISHIFFI SVHALDVGAMSVFLYAFKTRREYGLDL MEDYCGARLTHNAIRIGGVPLDLPNNW LEGLKFLGEMRECKKLIQGLLDKNRI WRMRLENVGVWTKMAQSWGMSGIM LRGTGIAYDIRKEEPEYELKELDFDVPV GNYGDSYDRYCLYMLEIDESVRIEQLI PMYAKTDTPIMAQNPHYISAPKEDIMT QNYALMQHFVLVAQGI/RPPVGEVYAP TESPKGELGFFHSEGE/EPYHRLKIRAP SFYHIGALSDILVGQYLADAVTVIGSTN AVFGEVDR</p>	1984	<p>GCAAAAAAGTAAAAAATAATTAGCACTAGCGCATGGGTGTTGAAAAAGCATGAAAAATAGACAAACCCAT TCTAACGCCACAAAACATCAAAAAGATTTGCACATTCGATCTAAATTTCTCCTTAGGCAAGCAATCAATCACGCTT GTTAGCCTTTAAGCTATAACCTTTTTTGATATAAGCCTACTCAAAATCACCCCACTCACCGGCGCACGCACCA GATCCGCTTGCAATTAAGCAGCGTGATCATAGGATCGTGGTGAGGGCTTTATGGGTGGCAGATGAAAAACGCT AGGAGTATCTCAATTAAGCGTGAAAAATAAGCCCACTTACTCATGCTCCATGCCCTAGTTAGAGTTTGAATTT AAAGGAGCGATCTATAAATCGCTCCCAATGCTGAACGCTTATGCCCTTTTAAAGATCTATCCTTTTTTAT GATTGATCTTTTGGTTGCTCTTCTGGGTTTGGTTGAGGTGCGCTATATGTTCTTGTATGGTTTTTCTCCACCCAC AGGAGCGTTTTTAAACTCTTTTGAATCTTGGCTGATTTTAAACAAAGCTATCGTTAAATGCTGTTGTAGCTGTTTT TGAGGTTTTCTTCACTTCTGTTGATGTTTCAAAATTTCTTTTTGAATCATCTCTGTTGAGGCCATT</p> <p>1979</p> <p>VMGTGKKHGVGLYYFNPCLKIPTKSL ECGEIGNVSLGLKSVTDIAVGDTLTDAK NPSTKPIEGFMPAKPFV/FAGLYPIETDR FEDLREALKLQINDCALNFEPESSVA LGFGFRVGLGLHMEI/IKERLEREF LNLIATPTVVEVHLTDNSIKYVQNPS ELPPENCIAIKEPFVRATITPTSEFLGN LMQLNNKRGIQEKME/LNQSRVMLT YSLPSNEIVMDFYDKLKSCCTKGYASFD YEPIENREANLV</p> <p>1980</p> <p>GADEVFCIGDIFLTGGELGALCLDISIAR HIQGVLGNAQSLENES/FENHYLEAPNF ANAVFKSKEINKIPAPLE/YSKGNHAKIK QLKLDLSKLRTKIFYRLDLFKQHK</p>	1979	<p>VMGTGKKHGVGLYYFNPCLKIPTKSL ECGEIGNVSLGLKSVTDIAVGDTLTDAK NPSTKPIEGFMPAKPFV/FAGLYPIETDR FEDLREALKLQINDCALNFEPESSVA LGFGFRVGLGLHMEI/IKERLEREF LNLIATPTVVEVHLTDNSIKYVQNPS ELPPENCIAIKEPFVRATITPTSEFLGN LMQLNNKRGIQEKME/LNQSRVMLT YSLPSNEIVMDFYDKLKSCCTKGYASFD YEPIENREANLV</p> <p>1980</p> <p>GADEVFCIGDIFLTGGELGALCLDISIAR HIQGVLGNAQSLENES/FENHYLEAPNF ANAVFKSKEINKIPAPLE/YSKGNHAKIK QLKLDLSKLRTKIFYRLDLFKQHK</p>	1980	<p>LLNLEIPRRAQVIRTILLNRMISHIFFI SVHALDVGAMSVFLYAFKTRREYGLDL MEDYCGARLTHNAIRIGGVPLDLPNNW LEGLKFLGEMRECKKLIQGLLDKNRI WRMRLENVGVWTKMAQSWGMSGIM LRGTGIAYDIRKEEPEYELKELDFDVPV GNYGDSYDRYCLYMLEIDESVRIEQLI PMYAKTDTPIMAQNPHYISAPKEDIMT QNYALMQHFVLVAQGI/RPPVGEVYAP TESPKGELGFFHSEGE/EPYHRLKIRAP SFYHIGALSDILVGQYLADAVTVIGSTN AVFGEVDR</p> <p>1982</p> <p>LLNLEIPRRAQVIRTILLNRMISHIFFI SVHALDVGAMSVFLYAFKTRREYGLDL MEDYCGARLTHNAIRIGGVPLDLPNNW LEGLKFLGEMRECKKLIQGLLDKNRI WRMRLENVGVWTKMAQSWGMSGIM LRGTGIAYDIRKEEPEYELKELDFDVPV GNYGDSYDRYCLYMLEIDESVRIEQLI PMYAKTDTPIMAQNPHYISAPKEDIMT QNYALMQHFVLVAQGI/RPPVGEVYAP TESPKGELGFFHSEGE/EPYHRLKIRAP SFYHIGALSDILVGQYLADAVTVIGSTN AVFGEVDR</p> <p>1984</p> <p>LLNLEIPRRAQVIRTILLNRMISHIFFI SVHALDVGAMSVFLYAFKTRREYGLDL MEDYCGARLTHNAIRIGGVPLDLPNNW LEGLKFLGEMRECKKLIQGLLDKNRI WRMRLENVGVWTKMAQSWGMSGIM LRGTGIAYDIRKEEPEYELKELDFDVPV GNYGDSYDRYCLYMLEIDESVRIEQLI PMYAKTDTPIMAQNPHYISAPKEDIMT QNYALMQHFVLVAQGI/RPPVGEVYAP TESPKGELGFFHSEGE/EPYHRLKIRAP SFYHIGALSDILVGQYLADAVTVIGSTN AVFGEVDR</p>	1982	<p>LLNLEIPRRAQVIRTILLNRMISHIFFI SVHALDVGAMSVFLYAFKTRREYGLDL MEDYCGARLTHNAIRIGGVPLDLPNNW LEGLKFLGEMRECKKLIQGLLDKNRI WRMRLENVGVWTKMAQSWGMSGIM LRGTGIAYDIRKEEPEYELKELDFDVPV GNYGDSYDRYCLYMLEIDESVRIEQLI PMYAKTDTPIMAQNPHYISAPKEDIMT QNYALMQHFVLVAQGI/RPPVGEVYAP TESPKGELGFFHSEGE/EPYHRLKIRAP SFYHIGALSDILVGQYLADAVTVIGSTN AVFGEVDR</p> <p>1984</p> <p>LLNLEIPRRAQVIRTILLNRMISHIFFI SVHALDVGAMSVFLYAFKTRREYGLDL MEDYCGARLTHNAIRIGGVPLDLPNNW LEGLKFLGEMRECKKLIQGLLDKNRI WRMRLENVGVWTKMAQSWGMSGIM LRGTGIAYDIRKEEPEYELKELDFDVPV GNYGDSYDRYCLYMLEIDESVRIEQLI PMYAKTDTPIMAQNPHYISAPKEDIMT QNYALMQHFVLVAQGI/RPPVGEVYAP TESPKGELGFFHSEGE/EPYHRLKIRAP SFYHIGALSDILVGQYLADAVTVIGSTN AVFGEVDR</p>	1984	<p>LLNLEIPRRAQVIRTILLNRMISHIFFI SVHALDVGAMSVFLYAFKTRREYGLDL MEDYCGARLTHNAIRIGGVPLDLPNNW LEGLKFLGEMRECKKLIQGLLDKNRI WRMRLENVGVWTKMAQSWGMSGIM LRGTGIAYDIRKEEPEYELKELDFDVPV GNYGDSYDRYCLYMLEIDESVRIEQLI PMYAKTDTPIMAQNPHYISAPKEDIMT QNYALMQHFVLVAQGI/RPPVGEVYAP TESPKGELGFFHSEGE/EPYHRLKIRAP SFYHIGALSDILVGQYLADAVTVIGSTN AVFGEVDR</p> <p>1984</p> <p>LLNLEIPRRAQVIRTILLNRMISHIFFI SVHALDVGAMSVFLYAFKTRREYGLDL MEDYCGARLTHNAIRIGGVPLDLPNNW LEGLKFLGEMRECKKLIQGLLDKNRI WRMRLENVGVWTKMAQSWGMSGIM LRGTGIAYDIRKEEPEYELKELDFDVPV GNYGDSYDRYCLYMLEIDESVRIEQLI PMYAKTDTPIMAQNPHYISAPKEDIMT QNYALMQHFVLVAQGI/RPPVGEVYAP TESPKGELGFFHSEGE/EPYHRLKIRAP SFYHIGALSDILVGQYLADAVTVIGSTN AVFGEVDR</p>	1984	<p>LLNLEIPRRAQVIRTILLNRMISHIFFI SVHALDVGAMSVFLYAFKTRREYGLDL MEDYCGARLTHNAIRIGGVPLDLPNNW LEGLKFLGEMRECKKLIQGLLDKNRI WRMRLENVGVWTKMAQSWGMSGIM LRGTGIAYDIRKEEPEYELKELDFDVPV GNYGDSYDRYCLYMLEIDESVRIEQLI PMYAKTDTPIMAQNPHYISAPKEDIMT QNYALMQHFVLVAQGI/RPPVGEVYAP TESPKGELGFFHSEGE/EPYHRLKIRAP SFYHIGALSDILVGQYLADAVTVIGSTN AVFGEVDR</p> <p>1984</p> <p>LLNLEIPRRAQVIRTILLNRMISHIFFI SVHALDVGAMSVFLYAFKTRREYGLDL MEDYCGARLTHNAIRIGGVPLDLPNNW LEGLKFLGEMRECKKLIQGLLDKNRI WRMRLENVGVWTKMAQSWGMSGIM LRGTGIAYDIRKEEPE</p>
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HP0909	1985	TACCAATTTATCCTAACAAAGTGGTGTGTCGCGCAAGGTTCCGCTCAAAAAAGTGTGTTTTCTTTAAAAAGAGCAAG GCGTGATATGAACGCTTTGATTTGCTTTTACGCGCTGATGGCATGCCTAAAAAGGTTATATTGATATGGCGG ATGGGCTTTAAGGAAGGGGATTTTAGTCCGTTGATTAAGGCAAGCGCACAAAAAGTGCAGCTCTAATC CCTGGGAAAGCGCTATTTTACGCAAAATTTGAGCGAGACTTACCAACTAGAAACAGCGATCTCAATCAGGC TTATGAAGCATCGCTCCACGATTAATGCGGAGTATAGAGATGGGTGATGCGCAGACACTTATCATTTGC CTTAGGGGAGGACGCTTTAAATCATGCAAACTTTGATGTCATCCATGAACACACGAGCCTTAAGCAAAAC AATGGCTTGGATACCTAACAAAGAGTGGTTGAAAAATCATCTCGCTTCTATTGTGCAAAAAGAGCCGCTA ATGTTGAAGAAATGCCCTTGATTCGAGCGTGAATTTTAAACCGCTTGAACCAAGCGCATTAACACCGATACACCCCTACAATACC GCTTGAATTAAGGTTTGCCTAAATCCTGTAGGAGCGTGAGCCTAGAGCGGATAGAGCGGTGATCTCCCTAA AAAAAGGATTTCTGTATTTGTGAAATGCCGGATAAAAACATGCTTACAGCGGACTTATAAGAGCATTTAAAA AACATTAATCTTCTAATAATCATTTTAAGATTAAGTAAATGGGCGTTTTCTTTTGAATGAGTAAAGTGTTT AGTATCTTCTCATTTTAAATTTAAGTCTCTACTATTAAAGCATTTTAGAATTTATTAACCAAGGCTTGCTACAAATTTTAGG CAAAATTTG	1986	PIYPNKVVVVPQGSLLKVVFFSLKEQGV DMNALDLLFLRLMGMPKKGYIDMGDG ALRKGDFLVRLIKAKAAQKSATLIPGES RYFFTQILSETYQLETSDLNQAYESIAP RLNGEVIEDGVWPDYTHLPLGEDAFKI MQTLIGQSMKKHEALSKQWLGYYHKE EWFEEKILASIVQKEAANVEEMPLIASVI FNRLKGMPLQMDGALNYQEFSHAKV TKERIKTDNTPYNTYKFKGLPKNPVGS VSLEAIRAVIFPKKTDLYFVKMPDKKH AFSATYKEHLKNINLSNNHF
HP0909	1987	TAGATACTATTAACTTTCTGAAGTTACTCTTATAGGGGCGGTGGGATAGTTCGCCCTTCCAAACCTTTTGTTTT CCCATCTCAAGAGCGGTGGATAAAAGCGTGAGAAATTTGAAAAATCTTATAGAAAGCCCTGAATTAAGAGCA AGGTTGAAAGCTATCATACAGCAGCGAATCGCAACCGCAATTCCAACTCAAATCTTAAGACAAAAAGCGCTAAC AAATACGGCGTGAGCGCTCAACCATTTGGATCAGTGGTGAGCTGCTTTTCTGGGACTTCTCAAGCGAGCGTGT CAAAGAAGATGGCAAGAAATACGACATGATCATTAGAGTGCCTGATGACAAAGCGGTTTCTGTAGAAAGACATCAAAAC GCTTGCAAGTGGTAACAAATACGATAAATGATGTTTTAGACGCTTATAGGAAATCACAGAAACTAAAGCCCGT CCAGTATTCTCGCTATAACCGCCCAACGCGGTACGGTCTGCTGAGCCTAATAGGAATGCGGGCGTTCTTTA GGCGAGATTTAAGCGAAGTGAGCAAAACACTAAAGAAATGTTGGTTGAAGGGGCGAATACAGATTTACCGGAGA AGCGGATAACGCCAAAGAGAGCAACGGGAGTTTTAGTCGCTTACGACAGCGTTGTGCTGATTTATATGATTT TAGCGGCGTTGATGAGTCCATTTAGAGCCTTTATCATCATGTTACCATGCCITTAAGTTTTCAGGGCGGTTTTT TGCTCTAGGTTAGTCCATCAGCCTTTGAGCATGTTCTATGATAGCTTGATTTGCTCATTTGATGGTGGGTAA AAACGCCACGCTTTAATGATGTGGCAATGAAGAGCGTAAAGAGGTTTGAATATCAAGAGCGCATTTTATTGCG CGGCAAAACCGCTAAGACCGATTTAATGACGACCATTTGCGATGTTTGGCGGATGCTGCTTACGCTTGGCGG AGTGGGATGGAGCGGC	1988	DTINLSEVTLIGGGDSSPFQTFVFSHS QEAVDKSVENLKKFLLESPELKGKVES YHTSTSESQLQLKILRQNAKNGYVS AQTIGSVSSAFSGTSSQASVFKEDGKE YDMIRVPDDKRVSVEDIKRLQVRNKY DKLMFLDALVEITETKSPSSISRYNRQR SVTVLAEPNRNAGVSLGEILTQVSKNT KEWLVEGANRYFTGEADNAKESNGEF LVALATAFVLYMILAAALYESILEPFIMV TMPLSFGAFAFALGLVHQPLSMFMSIG LILLIGMVGNATLLIDVANEERKGLNI QEAILFAGKTRLRPILMTTAMVCGMLP LALASGDGAAMKSPIGMIAMSGGLMISM VLSLL
HP0909	1989	CCAAAAGAAATTTAAAAAGCGATCACCCCAACAAATCGCTTATTTTAAAGATAAAAGTGTCTTTATCTCAATGTTT CAGGCAATGTTTTTTTCTTTTGAAGAGAAATCCTAAAGATTTAAAGCCATTAAAGAAAGGCTTAAAGACGATTGA GCCTAACGCTGACCCAAAGCGCTCATGCGTTTTTAAACCTTCAAGCGAGCTTGAATTTAGAAATGCGTCCCGCAA CCACTTGGCGTTTGACACCCCTTTAATCCCAACCGCTTTCAGCGTGCCTTATACGCTAATCGTTTGGCGGATA ACCCCTCTCTTTTCCCAAGAGGATAAAACCTATCAACGCTTTGATCAAGCCCTTAATAAGGCTTACTATTCTCT TATGGAGGTTTAGAAAAGCGTTTGAACGCTATAAAAATGCAGAGTGGCTTAAAGCATGAAAAGATTGCATTTT TATTTTGTCTTTTTCGGTAGGATTTAATTTGGCATGTTTATTGGAAAAAGCCCTAGAAATTGAAATTAG CAACCTC	1990	QKEFKKAITQIAYFLKDKSAFILNVSG NVFFSFEENPKDLKAKEKRLKKTIEPNA DPKAVMRFLNLQASLILECVPQTTCPF DTLLIPTAFSVVYVYANRLGDNPSLFSQ EDKTYHNALIKALNKAYYSLEMEGLEKR LNAIKNAEWL
HP0909	1991	TAAGTGAAATTTAGTTTAAAGCGTGGCTAAAGTGTGGAACACATTGATGAAACAAAGTTTAAATGAATTAATAAAA AACGAACAAGAGGATTAGCGCTTAGAAGAGCTGTTTTTGGAAATCATTTATCAAAATATTAAGATAAAATTTCTCT ATCAATGCGGAACGACCATTAATAAACAGAAAAACGATGCGTTTTATGATGAAAAAGGAGAGATTAGAGAGTTTT TAGACGGGAGTTTGGGGCGGATAAATATGAGATTAATAAATCAAGCGTGGAGAAAAATGCCTGTATGAAAAATTC ATGCAAGTGATAGCGAGATTGAAAAAGACACGATTGAAGAAATCAACGACACTAAATCATTTGTTTTGGTAAGCTC CCTAGGGT	1992	KVKLSFKSVAKVLENIDENKFNKNEIKNE QEGRLRLEELFLEIYQNIKDKISYQMR ETIKNRKNDAFYDEKGEIREFLDGL GADKYEIKNSSVREKCLYENFMQVDS EIEKDTIESNDTKIIVFGKLP

HP0909	1993	AGCGGTAGAGCATGCGAAAAAATTTGGTATATCATTTCTTTTCAAGAGACAACGATTGCAGAGGCCCATGCAGG CCATGCAAGCTCAAGCCACGGTTTAGAGATTGACGCTTCCAAAAATTCGCCAAATGCAAGAACTTTGGATTTTA TTGCTGAGCGTTTGAATAATGTCAAAAAGAAAAAGGGGTGAGCTTTTCCATAAAGCCAAATAAAATCAGCGGCCAT CAAGCCATTAGCTCAGACATTTTGAATAAGGGGCATAGACAAATTTGGCTTGAATAATGTCAAAATTTGGCGTGCT GACATTAGCGTGGAATAATCGTTAAAGAAAAACCTGAGATTATCTTTATTTGGTGATAGCCCACTCACGCCTGAA GATGTGTTAAACAACCCCAATTTGCTACCATCAAGCCATTAAAAACAAGCAGGTTTATAAACTCCCCACAATGGAT ATTGGCGGCGCTAGAGCCCCCACTATAAGTCTTTTATCGC	1994	AVEHAKFGISFLSFQETTTIAEQAM QAQATVLEIDASKKFAKMQETLDFIAER LKNVKKKGVELFHKANKISGHQAISS DILEKGGIDNFKLYV/KFGRADISVEKI VKENPEIIFWISPLT ² EDVLNPKFAT IKAINKQVYKLP ¹ TMD'GGPRAPLISFI
HP1478	1995	TGCAAGCCACATTCAAGGGCCATTGCTCATTTTAGCGGGAGCTGGGAGCTAAGACTAAGACTTTAACGAGCGGT TTAGCGTATTGATTGGCGTTTGTGGCTGCTAGCGAGAACACTTAACGCTCACITTCACCAATAAAGCGAGTAA GAAATGCAAGAAAGGGCTTTGAAATTTGTTGAAAAACCAAGCCCTTATCCCCCTTGTCTTGACATTCCTCCATCGTTTT GGTTTGCTGTTTTAAGGCAACACATGAATCTTTTAAAGGCGATGCGATTTTCGGTATTAGATAGCGATGAAGTC AAAACGCTGTGCAACAGCTCAAAATTTCAAACTTTAGAGCCAGTATTTCTCAATCAAAACGCGATGATGATTTG AGCATGCAAGATAGCGAATGCTATAAAGCGTATGAGCTTTATCAAAACGCGCTCAAAAAGACAAATTTAGTGATTTT GACGATTTGCTTTTTAAGCCTTAAGATTTTACAAGATAATGAACCATCGCCAAAGAGACTAGCGAGCGCTACCCAC TACATTATGATAGTATCAAGACACGACGCTTGAATTTAGGGGGCTGATATTTCTAACATTTTAAATTTT AATTTGTGCGTGGCGGATGACGATCAGACATTTATGGTTAGGGGGCTGATATTTCTAACATTTTAAATTTT TCCAAGCATTTTAAAGGGGCTAAATAGTGAAATTAGAGACCAACTACCGCTAGCGCTGAAATTTAGCGTGCGC TAATCTCTCATCAGCCACAACCAACCGCCATATTAAACGCTTCAAAGTTCAAAGGCTCGCATAAAGCGTGCT TTGTAAGAATAATTTGACGCAAAAGAGAGAGCGCTGATGTGGCTTATCAATCAAGCCCTTTTAAAGAAAGGCGC AGAAATTTAGAAAAATATCGCTATTTGTATCGCTTAAACGGGCTTAGCGCGACGATTGAAGAGAGCTTGAACGCTTTGA ATATCCCTTATAGG	1996	ASHIQGPLLILAGAGS'GKT ¹ TLTSLAY LIGVCGVPSENTLTLT'FTNKASKEMQE RALKLLKNQALIPPLLCTFHRFGLLFLR QHMNLLKRACDFSVLDSDEVKTLCQ LKISFRASISQIKNGIMDL ¹ SMQDSEC YKAYELYQNALK ¹ DN ¹ .VDFD ¹ LLFLSL KILQDNETIAKETSER ¹ YHYIMVDEYQDT NALQELFKLSFTHHNL ¹ CVVGDDDDQS IYGF ¹ RGADISNILNFSKHFKGAKIVKLET NYRSSAEILACANSLISHNQHRHIKTLQ SFKGSHKSVWCKEYL ¹ "QKEESLDVAY QIKALLKGENLENIAI ¹ .YRLNGLSRSE ESLNALNIPYRLIGALSFYERAEIKDALA FMHLVAKKDDRRFFIKV ¹ LNKPPRGLGK ITQEWIFSLDEEGLNI.EEALKLGAFKD KLNPKNEYALKQFIAM ¹ IGRLREAFEISV EEFC ¹ SRFLEETNLLKS ¹ YEKEDNYEERE GFVKELLTVKEYFKTNPT ¹ THSLDLFLNE SVLDAHNTENAQKVS ¹ CMSVHMSKGLE FKHV ¹ FVIGLEE ¹ GGFFPHRGFNQESDLEE ERRLAYVAITRAKEELQLSYVKERSYF GRKIS ¹ CS ¹ SPSVFLEEACILLNQDNPPKQD HQKDAPIKVGD ¹ LIRHKIFGTGRVLGVEK GLSGCLKINCGGNV ¹ DKISEKFVEKV DNGF
HP1231	1997	GGTTTTAAACGCCACCCATCATTAGAGACATTCAAGAATTAAGCTCCAATGCGGGGGATATGGATTGCAAAAAGCT CATTTTAGGGCTTTTAAAAAAGTGGCTTGATATTTATGATTATTTGTTAAAGAGGGCAAAAAGATGCGGAT ATTTAAGGGGTTAGAGCGCTATTTTACCAACTTTTATTTTTCGCTCATATTAACACGACCGGTTTATGGACG CTAAAGAGGTTTAGGCTACGCTCCCTAAAGAAATTCGCGAAAAATACGCTAAACGCGCTTGGCTTGAAGAA GCCGGCTAAGAGGGTTTTGAAATTTTATGTTATGGCACATTCAAAGCATGCAAGGGCAAAAGGAATTTGGGCTT TTTGATTTGACCTCCATTCAAAAAATCATTAACCCCTAAAAAATGCCTAAGCGGTTTTTCGTTTGAAGCTTTAATATTA CTAATAAACTCAATTTAATCCAAAAACAAGCGAA	1998	VLNAPITLEDIQELSSNAGDMDLOKLIL GLFLKKSALDIYDYLK ¹ EGKKDADILRG LERYFYQLFLFAHIKTGLMDAKEVLG YAPPK ¹ EIAENYAKNALRLKEAGYKRVF EIFRLWHIQSMQGGQK ¹ ELGFLYLT ¹ SIQKII NP

HP0262	1999	TATTGAACTCCAGCTTAACGATTGCGCTTTAAATTTGAGCCTGAAAGCTCTGTGGCGCTTGGCTTTGGCTTAGGG TGGGCTTTTAGGGTTATTGCACATGGAAGTATTAAAGAAAGACTGGAAGGAAATTTGGCTTAACCTCATCGCT ACCGCTCCACGGTGTATGAAGTGCATTTAACGGATAATAGCATCAATACGTCCAAACCTAGCGAATTGCC CCCTGAAATTTGATCGCTTGCATCAAGAGCGCTTTGTGAGGGGACGATCATCAGCCGAGTGAATTTTGGTA ATTTAATGCAGTTATTGAATAATAAAGAGGCAATCAAGAAATGGAATATTGAACCAATCTCGTGTCTCATGCTCAC TTATTCCTTGGCGAGCAATGAAATTTGTGATGGATTTTATGACAACTCAATCTTGCATTAAGGATGCGAGCTT TGATTATGAGCCTATAGAAACAGAGAGCTAATCTTGTGAATTAGATGTGAGGTGGCAGCGGATGTGGTGGAT GCGCTTCTATCATTATAGATAAGAAATAGGCGTATGAAAGGGGCGCTTTAGTGGAAACGATGAAAGAGCTTAT GCCAAGACAGCTTTTGAAGTCGCTATCCAGCGAGCGTGGGAAATAAATCATCGCCAGAGAGACGATCAAACTCG TCGGTAAGAACGTAACGGCTAAGTGTATGGGGGCGATATACACGAAAGAACTCTTAGAAAGCAAAAGAG GGCAAGAACGCTATCGGTAAAGTGGAGCTTCCCAAGAGCGTTTTCAGGATATTAAGATCGATTA GGGCGTTAGCTTCTATGGCAAAACATAAGAACTATGAAATTTAAATCTCATAGGCTATGCTTTGGCAAAATTTGATA ATGATTTTATTAAAGAAATTTGGCTTTTCTACTAAATGCTTTTTTGAATATTGTGCCAAATTTGGCCTAGCTGACACG ACTGGCGTTATCAAA	2000	LKLQNDALNFEPESSVALGFGFRVG FLGLHMEVIEREREFGLNLIATPT VVEVHLTDNSIKYVQNPSSELPENCIA CIKEPFVRATITPSEFLGNLMQLLNK RGQEKMEYLNQSRVMLTYSLSNEIV MDFYDKLKSCCTKGYASFDYEPENREA NLVKLDVRVAGDVWDALSIIDKNKAYE KGRALVETMKELIPRQLFEVAIQASVG NKIARETIKSVGKNVTAKCYGGDITRK RKLEKQKEGKKRMAIGKVELPQEAF LAILKID
HP0262	2001	CGAGTAGCCTTTAGTAACCTTAAATAATGCTTATTGTTGATGTGAGCGAGTTAAACGCTTATCTTTGGCGCGCTT TAGCTCTGTGGTATGGAAGAGCGGCTTTACGATGTGGTCAAGATAAGACAGAGAGTAAATAATGGCAGAC ATCATGGATATAAGTCAATCTTTACACTGAAAGTCAATAGGATTGCAAGAAAGGTGTTTGTAGTGTCAAAAG GCTCAAAATGTAAACCAAAACCGCTCAAGAGTGTAAACCTTACCTTTGAGCTTTGAAATCAATCTT TGAAACAAGAGGTAAAGTGAAGCGCTTTAGAGGGAAGCTTGACAAAGAGTCTTTAAGAAATTTTATGTGAAA GTTCCAGAGGCGCTAGCATTTGCCGCTTGTGCTTAAAGAGGAGAAAGCGTTATGGGATTAACCTTATAAGC CCTACACCCCAAGCAGCGCTTATGCTGCTTAAAGACATTACCGCAAAAGCAGTGTCAAGGCTTA CTCACTAAGCTTAAAGCAACAGCAGGAGAAACAATAACGGGGCATCAGCGCCCAAGAGAGAGGGGCTA AAAACTCTATCGCATTTATTGATTTCAAGCGCAATAAATAAATGAGGAAAGTGGCTGCGATTGAGTATGAT TCTACGATTGGATCAAGGAATTTGTGGCGATCAAGGAGAGTTTATCGCCCAACAAGCGGTGGCTGGAATTAGA GCGATCAAGCTATGCCAACTCATCGCGCAACCATCTCGCATGTGCTTAATGGCGGATCGCTGTTGGTGAGCGCG GATCTCTAGGCACTGGTTTAACTACATCTTTCTAACCTAACCCCAAGATTAAAGAGCGCCCTTATTGT CCGTCAATGATTTAAGCTTCTTCTTCTACCCCAAAACGATCGGAATCTCTCTAGCCACCATAGAGATGACTT ATCAAAACCCCATGTTTGGCATGTTGGCAATTTGAAATGAAAGCTTAAAGAGCATGATTAAGTAAATCCCTA GTTTTTATGGCTTTTGAAGAGCTTAAAGAAAGATTGCTTGTCTTAAAGAGCATGACAGCTGCTGGATTATAAAT ATTGAGCTCTTCAAACTCTTTGAAACCGGCTTTTAGCGTGTCTATACAATAAGGTTACTCTGTGAAAACTCCAAAC CGCTTATTATACGGACAATCTTGAAGAGAGCGCTAGAGAGACTGCAAGCCTTTTGAACACCATTAATTTCTAC ACGGAGATTATTGAAAAG	2002	ELAFSNLKKCLVDVSELNAYLLAFASS VMEEAAAFQHVVDKTEE
HP1230	2003	TCTACGATTGGATCAAGGAATTTGTGGCGATCAAGGAGAGTTTATCGCCCAACAAGCGGTGGCTGGAATTAGA GCGATCAAGCTATGCCAACTCATCGCGCAACCATCTCGCATGTGCTTAATGGCGGATCGCTGTTGGTGAGCGCG GATCTCTAGGCACTGGTTTAACTACATCTTTCTAACCTAACCCCAAGATTAAAGAGCGCCCTTATTGT CCGTCAATGATTTAAGCTTCTTCTTCTACCCCAAAACGATCGGAATCTCTCTAGCCACCATAGAGATGACTT ATCAAAACCCCATGTTTGGCATGTTGGCAATTTGAAATGAAAGCTTAAAGAGCATGATTAAGTAAATCCCTA GTTTTTATGGCTTTTGAAGAGCTTAAAGAAAGATTGCTTGTCTTAAAGAGCATGACAGCTGCTGGATTATAAAT ATTGAGCTCTTCAAACTCTTTGAAACCGGCTTTTAGCGTGTCTATACAATAAGGTTACTCTGTGAAAACTCCAAAC CGCTTATTATACGGACAATCTTGAAGAGAGCGCTAGAGAGACTGCAAGCCTTTTGAACACCATTAATTTCTAC ACGGAGATTATTGAAAAG	2004	YDWIKFVRDQGEFIAQQSGWLELER SSYAKLIAQTISHVLNNGSLLVSADSSR HWFNLNLSNLPKOLKERPLLSVIDFN ASSFYKNDANLSLATIEMTYQNPMPFW HVGKIENEGKLTILLSKIPSFLWLFEELK EDCLLLKEHDSLLDYKLLQLFKLFENAL FSVL YNKVTL
HP1230	2005	CTTGGCGCTAGTCAACAAATCTCTAAAGTTAGTCTCATAGATGAAATTAATTTAGCCAACTCAAAATACAAACCCT AACGCAAGCAAGAGCGATATTGCTTTTATGCCCCCAACCAAGCTTATGACCACGATTACAGCTAAATACGGC GGGTTGCTTAAAGAAATTTTAAAGCCAGAAATAAGTGGCATGCAATTTAGCCACAGCGTGGATGTGGTATTGAAGT AGCGCTAAATCCAAATTAACGCCCA	2006	LALVKQNPVKVSLIEYENYFSQLKYNPN ASKSDIAFFYAPNQVLCTTTITAKYGALL KEILSQNKVGMHLAHSVDVRIEVPKIQ INA

HP0263	2007	AGCGTGGCGATCCTTTGATTTCAAAACAAATCGGCGCTAGCGGACAGCCCTAATGAAAGGTCATCAAAGC CATAGATGAATTAAGAGCTATGAAATACGAAATCCGGTAAGCTTTGTCAATGATAACCCCTATTGATGAAGCC AAGCATCAATACGGCACTAAAGAGCGATTTCAGCACCAGCTGAGCTTTTACGCCCATTTTATCCGTGATGGA AGCAAAAGATTTAGACGAAGCGATAGAAATAGCCAAATTCACCGGTACGGCTGACTAGCGGTAGAGTCGTTGG ACGAAAGGAGTGGGAATATTATTAGAACGCATTGAAGCCGGTAATATCTATCAACAAGCCACACAGAGCGG ATTGCTTGGCCAGCCTTTTGGGGGTTAAATAATCCGCTGTGGGTTGGAGGAAAGTAGGCAATTTTCAACTA TATCAGCAATTTGTAATATCTGCCAAGAGAAAGAACGCAACGCCCTTAAACCCCTTAAGCGAAGCCTTAG AAACTTAACCTCAAAAGGCTATGATGAGCATACCGATAGTTGAAGCGCGGATTTTATGGCAAAAGCTACGCTT ATCATTACAAACATGAATTCAGCCAACTAAAGACTATGTCAAAATCAGAGCGGAGCAACCTTTTCTCTACACTAA AGTTAAAGCGTGGCTATCGCATCACCGAAAGACACTTAAAGCGACATGTTAGCGGTGCTTTAGCATGTTTAA TTTCTCAATCCCTTTAAGCTCAGCATAGAAACGAAACGAAACAAAGATTAAACCTTTTCTTAGAATGCTTAA AGCGCTCAAGCAAGCGCCCTATTGTTATGAAAGCTTGCAAAATTTAGCGAGAAATGAATACCTTCAATCGTGT CCGTTATCTCAAAAGCGATTTGGATTATTGCACGAACGAGCGCTTTAGGGATGGTTTAGCCACGGCTAAAC CATGCTAAATGGGC	2008	SVGDPDFKKNIGALADKPNKVIKID ELKSYENYEIPVSFVNDNFYLMKPSIKY GTTKGDFTHQTELFTPILSVMEAKDLD EAIEIANSTGYGLTSALESIDEREWEY LERIEAGNIYINKPTTGAIVI.RQPFGGV KKSAVGFRKV/GIFNYITQFVNICQEEE DENALKNPLSEALENLTKQGYDEHTHE LKRAIFMAKSYAYHYKHEFSQTKDYVKI RGEDNLFSTYTKVKSVMGYRTEKDTLSD MLGVALACLISQIPLTSLIENERTNKDLT FFLECLKALQASAPIVYESLQKFSEKLN TFNRVRYLKSDLDLHEQAASALGMVLA TAKPCLNGRFELLYHILERSVSISYHR YGNLGSRLRQPTCHK
HP0263	2009	TGATGGCACTAAGTATGATAGTGGGGAAGGATTTACCCCCCAAGCTATTGGGATAAAACCTTCTGGGCTACTG ATTCTATGAGTCTTTGATGAATGCCACTAAATGTGGCAGCAATCAGGCCAGGTGGCTCATTAACCCCTAGAGGT ATTGTTGGGAATAGATGGTGAGTGAACGGCTTGTTCCTAACTACTATCCGGTACGGCTACTTGCCTGGTGG CTCAAGCGCTATCAAGTCTATAAGCAAAATTTGACCTATGATAGCGACAGGTCCATATGGTAATGGGCGCTTTG ACATTACCGAGCAGGAGCAATGGATTGGATTACCAATGTTCCAAAGGTTTATGGGACTTTCAAGCTCACTAAGA ATATGAAAT	2010	DGTYDRWAKDFTPPSYWDKTSCGT DSMSLCMNATKMWQQSGIPGGVINPR GIGWEYMGEWNGLPFNYYPANAYLPG GSRRYQVYKANLTYDSDRV/HMVMGR FDITEQEOMDWIYQLFQGFYGTFLTK NMK
HP0263	2011	TTTGCAATTAAGAGAAAGCGAGGATTTAGTTCTTTAAGGGAGCAGATTTCCGCAATCAGATACCAAAACAGCAACT CAATTAATACCCCAAGATAGATGTGTTGACTATGGCTTTTGGATCCAAAACCCGCTTATGCCACAGGCGCTT TGGGAATTTCTACCCCGGTACGCAAAATACGGCTGGGTACTCGGCTTGAATATTTTATGATATAGGCTTGA GCTTGCAAAACAAATCCATCATGCTAGGCAATAGCGAATGAAAGAAATTTAGCGTATAAAAGCTAGAGCAAGAAA AAGACGAACAGCTTACAGAAATCGCTTGATATTGCCAGAGCAAGATTGAATCTTCAAGGCTAGTTGGATGCG GCCAATCTTCTTTGCCAATATTAAAGAGGAAATACGACGCTAATTTAGTGGATTACCCACCTATTAAAGGGCTTAA CCACGCGCTTTGATGCGGAAGTGGCTTACAAATTTAGCGCTCAATAATTATGAAGTGCAAAAGCCCAATTACATTTTCA ACAGCGGCATAAAATAGACGACTATGTGCATTAAAGGAATGAAATGAT	2012	LQLRERQDLVSLREQISAIRYQNKQLN YYPKIDVDFSWLFWIQKPAYATGRFGN FYPGQONTAGVTATLNFDDIGLSLQK QSIMLGQLANEKNLAYKLE:QEKDEQL YRKSLDIARAKIESSKASLD/ANLSFANI KRKYDANLVDFTTYLRGLTTRFDAEVA YNLALNNYEVQKANYIFNSGHKIDDYV H
HP0263	2013	ATTCTTGGGCTAGGCAATCTGAAGCGTTTAAAGCCATCCGCTCTAAAGCGACGCCAAAGGCTACACTTTAG CCCAAAAATTTAGGGCATGCTTGTGGGTAAAGGGATCTTACCCTGGACTTATTGTGAGCCAAAGGTTACCACC GTGGGCAGTCAAGACACACAGGGCGGATGACTAGAGATGAGTTAAGAGTTAGCGAGTTTGAAGTTTATGATCGCG CTTTGTGTTGAGAGTTTGGCATACCGCGCTTACCAAGCCTAGCGATGTGAGTTGCATGCAACCTTGCCT GGCTTATCACTCAAGAGCGGTGTGGCTTGCATCCGGCGATGGCGTATCCATACATGGCTGAATCGCATGG GATTGCTGATCTTTAGGCACAGGGGGGATAGCCACACCCGTTTCCCTTGGCATTAGTTCCCGGCGAGGAG TGGGCTAGTCCCTTTGACGCGTTACAGGCAGATGCCCTTGAACATGCCAGATCTGTGTTGGTGGCTTTTAAAG GGGAATGAATCCTGGATCACCTTAAGGATTTAGTGAATGCAATCCCTTATTATGCGATTAAAGGGTTACTCA CGGTGGAGAAAAGGTAAATCAATGTCTTTAACGGGCTATTTTAGAAATGAAGGCTTGCCTGATATAAATGG AGCAGGCTTTTGAACCTAAGCGATGCGAGTGGGAAAGAGTGCAGCGCTTGGCTGGCTTGAATAAAGAGCC GATGATTGAATCTTGAATCAATATCAAGCTGATTGATGAGATGATTGCAAGCGGTTATGAAGATAAAGAGACTT GAAAAACGCCGAGATGCGATGCAAGCTTGGGTGGATAATCCGGTATTGTTAGAGCCAGATAGTAACGCTCAATAC GCCGCTGTCATTGAAATTTGATGTGGCAGAAATCACGGAGCCTATTGTCATGCCCTAATGACCCCTGATGATGTCG TACTTTGAGCGAAGTTTAGCGGAT	2014	FLGLGESEAFKKPSAPKSDAKGYTLAQ KIVGHACGVKGLPGTYCEPKVTTVGS QDRTGAMTRDEVKELASLKFDAPFVLQ SFCHTAAYPKPSDVSLHATLPGFITQR GGVALHPGDGVHTWLNRM/GLPDTLG TGGDSHTRFPLGISFPAGSGLVAFAAV TGTMP/LNMPESVLVRFKGEIMNPGITLR DLVNAIPYAAIKGLLTVKKGKINVFN GRILEIEGLPDIKMEQAFELSDASAERS AAACVRLNKEPMIEYLKSNIKLIDEMIA SGYEDKETLKKRRDAMQAWVDNPVLL EPDSNAQYAAVIEIDVAETEPILACPND PDDVATLSEVLADTTGKRPHADEVFIG SCMTNIGHFRAFGIEIVKNAPISQARLW VVPSSKMDEQELINEGYAIFGAAGAR TEVPGCSLCMGNQARVRDNAVWFST TRNFDNRMRGAKVYLGSAELGAACA LLGRIPTKEEYMNLVSEKLESQKDIYR

					YMINFN
HP0263	2015	ATTAACACGATGTTTGGCGGACCATGCAAAAGGGGAGTGGCGGAAATCGTGGCTGTGGAAGCGACTTTCACAAGGG CTTTGCCGGCGTTGTGATTCAGGGTTAGCTAATAGCTCTATCCAAGAGCCAAACAGCGGTTCAATCGGCTTTA CAAAATAACGATTTCACITTCGCGCTTTAAAAATCACCATCAACCTTCCCGCTCAGATTGCCTAAATCCGGGAGT CATTTGATTTGCCCTATCGCTCTTTAATCGCTTTGCAAAAAACAAGAGTTGGCTTTTAAAGAGTGGTTTGCTTTTGGGG AGTTAGGGCTTGATGGCAAGATCAAAACCAATCCTAACATTTCCCATGCTTTTAGACATTGCCATTAAACACCCCG ATGCTAAGATCATTTGGCTAAGGCCAATGAAGAGCTTTTTCGCTTATCCCTAATTTGCAATGCTTTTGTGGGGC ATTTTAAAGAGCGTTAGAAATCTTGCAAAACCTGAAACCAAGCAGACACCCACAGAAACCTACCCCTTTAAAA CGATAGAATTGAACGATAAAGAGTATTATTTTCAGACGCTATGCCCTAGATTTTAAAGAAAGTTAAGGGGCAAGCTG TCGCTAAAGAGGCGCTTTGATCGCTAGCGCTGGGTTTCATAACTTGATTTAGAGGGAAGTCCAGGGTGTGGGAA AAGCATGATCATTAATCGCATGCGTTATATCTTGCCCTCCATTAAGCCTGAATGAAATCCTAGAAGCGGACAAAATTACG CATTTTAAAGCGAGCAAGACAGTGCCTATTACCCCTTAAGGAGTTT	2016	INTMFCATMQRGVAEIVAVEATFTRAL PAFVISGLANSSIQEAKQRVQSALQNN DFTFPPLKITINLSPDLPKSGSHFDLPI ALLIALQKQELAFKEWFAFGELGLDGKI KPNPNIFPMLLDIAIKHPHAKIAPKANE ELFSLIPNLQCFVGHFKEALEILQNPE TKADTHTKLPFKTIELNDKEYYFSDAY ALDFKEVKGQAVAKEAALIASAGFHNLI LEGSPGCGKSMINRMRYILPPLSLNEI LEATKLRLSEQDSAYYPLRS	
HP0263	2017	CTACTTTGGTGAGGGCAATCTGTAACTTTGATGGCAGACTCTTGTCAAGGGCACCGCAACCTTGGGAGATTG TAACCGGGGAAATCTATCCAAATGGCAGACACGCTCGCTTAAGCTGGGATTAGAAACAACATTTACAACCTA GGCCATAGAGGGTATGTGGCTAAACCGGGGAGAACATGACGAGGCTTAACCTATATCAAGACTTAGCGGCGG GTAAATACAAATTGCCCTGGGAAGATCACATGAAATCAAGACGCTCTATTATGGCTACCTACCAACCGGTGGG CGTTTGGGAAATAATCCCTAACCTTGCATTTTGTAGAACCGGTTTAAAGGTTCTGGTTTCCCTATTTTAAT TTTTTTTCAATCAATTTTACGAATAGTCTTCTATTGTAGAACATGTAAAAACCCATAATAAGCGTAAGCCCCCATAAA GGGATATAGCCACACAAACCATGTTATTTTGTATAAGACCACCACTTGTAGATGATAGAGCACTAAATCC ATAATAATGGCCACAATAGATCATTCGCGCTAAACATGCCAATTTATGAGCATGGCAGTAAGCGTAATCCCAAAACC ACCACCAAGATTGACAAAGAATACGAGACCAAGACCCCATGACACTCTTAACATCAAAATGCTAGAGTGTATCG TTTTTTTTCTGTTGTCAAGGGGGGTTGGCTAGAAATAGTATTGTTGAGTGTTTAAACAAATAACAGCGTTTA TAATGATGAAAGTTAGCCCCCTAATTTAGCGCCCCCAACAAGCTTCCACATTAGCCCAACCCACGCTCAAAAT CTCGCTTGAGCTTTAATATAGGGCTTATGAAAGTCTCTAACCGCACACAGCCCGCTTCTTGCCACAAGCCGC TCTCTAAATATTTTCTATCTCGCTAGGATCAACCGCTTTAAACGGCTCTAAAAACCGATAGATCCAGCCATTCCAA CACAGGAGAAAT	2018	YFGEQGICNFDGTTLVQGHNPWEIVT GEIYPKIMADNARLSWGLENNIYNL GHR GYVAKPGGEHDAGLT YIKDLAAGKYKL PWEDHMKIKDGSYGYPTTGGRF GK	

HP0263	2019	GAAATTTAGGGGTAATTCAGAGAGAAACCTCATCCACCCTAACGATGACGTGAACATGTCTCAAGCTCCAA CGACACTTCCCTACCGCAATGCACATTGTGAGCGTGCTAGAAATCACGCACAGACTGCTCCCTAGTTGGAGAATC TGTTAAACACCTTTAAAGAAACCAACCAATTAAGAGATTGTCAAGATCGGACGACGCAATTTACAAGACGCTA CGCCTTAACCTTGGGCAAGATTTAGCGGGTATCGGAGCATGTAGAGCATCTAACCAACAAATTTAGAGAGTT TGGAGCATTTAAGAGAAATAGCCATAGCGGGACGGCTAGGCACAGGGCTAACGCTCATAAAGAAATTTAGAGCGA AAAGTGGCTGAAGAAATGAGCCAGTTAGCGGCGTGAATTCGCTCTCGCCCAATAGTTCCTATGCCCTCACTA GCCATGACGCTATCGCTTATGCGCATGGGCTTTAAAGCTTTAGCGGCAATTAATGAATAATCGCTAACGATATTA GATGGCTTGGAGCGGGCGCTGTGGTTGGCGAGCTTAATATCCCTGAACGAGCGGCGAGTTCTATTAT GCCCGGTAAAGTCAATCCACGCAATGCGAAGCGATGACAATGGTGGCGGTGCAAGTGATGGGAATGATACCGCT ATTGGCATTTGGCCAGTCAGGTAATTTGAATGAACGTGTTCAAGCGGCTGATCATTTATAATTTCTTGCAAAAGT TTAAGGCTATTGAGCGATAGCATGGAAAGTTTAAATATCCATTGCGGAGCGGCTAGGCTTAATAGAGAAAAGAT TGATTATTACTTGACCATCTTTGATGTTAGTAAACCGCTTAACCGCATGTGGGCTATGAAAACGCCGCTAAAT CGCTAAAACGCCCAACAAAGGCAATTTCTTTAAAGAAAGCGCGCTGGAACCTGAAACCTTTGAGCGCTGAAGATT TTGACAAATTCGTGGTGGCTG	2020	EILGNGFREKKLHPNDDVNMSSQSSND TFPTAMHIVSVLEITHRLLPSLENLLKTF KEKSQQKKEIVKIGRTHLQDAPLTLG QEFSGYASMLEHSHKQKQILELHLREL AIGGTAVGTGLNAHKELSEKVAEELSQ FSGVKFVSAPNKFHALTSHDAIAYAHG AFKALANLMIANDIRWLASGPRCGL GELNIPENEPGSSIMPGKVNPQTQCEAM TMVAVQVMGNDTIGIAASQGNFELNV FKPVIYNFLQSLRLLSDSMESFNHCA SGIEPNREKIDYYLHLSMLVLTALNPHV GYENAAKIAKNAHKKGISLKE:SALELKL LSAEDFDKFFVPEK
HP0263	2021	GAAGATTTAGGCTCGTTTTGAAGAGCGCTTTGGGTTTGGCGTAGGGGAGTAAAGGCAAAAAGCTCTATCGC ACCGGATTTTGCACACCTTGAATGAGTTTCAAGAGCGGTTTTGGCTGTAAACCAACCTTAAAGTCCCAATA CCAGAGCGTTTGTGAAGTTGCGATGCGACGGGCTAAAGACAAAGCCCTAGAGACTTCAAGCAATGCAATGGG CAGGGCAGGTGTTATGCGTCAAGGTTTATGAGTTTGGCAAACTTGTGGGCGTGTCAAGGCAAGGGCAAGA TCGTTAAACCCCATGCCAAGCGTCAAGGTTAAACCTATATCTTAAAGATGAAGAAATGATGCGATAATCCCTG AGGCAATGATGATCAAAACCGCATGGTCTTAAATAAAGCAATGAATACGAGAAAGGAAAGAGGGGATTG TATTTAGAACGCAAGTCAAGAAATGAGCATTTCAAGCGGAAGCTGCGATTATTCATTAAAGCGCGGTTT TTTCAACCATATCGCTTTAGGCGATACGATTAAAGTGCGCTTTTAAAGGGGACGAACTGGAATTAATAATCCCTAG AAACGCCAGAGACAAGCAGACTTTTGGCTTTAGAAACGAGGGCGTGAACACCCCTGAAAGCTCT	2022	EDLGSFFEDAFGFGARGSKRQKSSIAP DYLQTLSELSFKEAVFGCKKTKIKVQYQS VCESCDGTGAKDKALETCKQCNQGQ QVFMQGGFMSFAQTGACQ3KGKIVK TPQACKGKTYLKDEEIDAIFEGIDDQ NRMVLKNKGNEYEKGRGDLYLEAQV KEDEHFKREGCDLFIKAPVFFITIALGH TIKVP5LKGDELELKIPRNARDKQTFAP RNEGKHPES
HP0263	2023	AATGAAGTGTATCGTTGAAAAGCTTCCACTTTCAAGAGCTTGTGAGCGTGTATTACGGCATGGTGTAAACGCA GAAGTGGCTGAACTTTAGAGAGGTGGAAGGCAATTAAGCAATTCACAAACGCTTTGAAAATGCAAAAAGT GGGCAATCGCTAGGTAGAAACCTTAGCGCTCAAGTGGCTTATGATAAGGCCCATATCGCTAGCGTTAAGGCT AAAGACGTGTTAGAAGTTTCGAGCTCTCGTTCAATTCATTTATCTAGCAAGGACGATTAGTGCCTTCAAGCAAA TTAGAGATCCGACGGAGAAAATCTGCCGATCTGAGCTTTTGTCTTCCACGCTCAATTCCTACCGGTTTTA AAGACTTTAGAAAATCAGATTCAATCTCTAAAGAAACACGAAATACAGATCGCTAAATCTTCCCCCAAGTGAGTT TTTTGGCTCTTATATTAGAGCAAAACAAATTCGGTGTGTAAGACATGATCCCTAGTTGTTGGCGGTGGCCG GGCGCATGCCATTCTTCTCCACAGGGCGCATTCAAAATACCAAGCGCAAAATAGCGGAGTTGCAAGTGAGT AGCGAACAAATCCAGGCTAAAACAAATGGAATATTAGTGAATAAGACTTATAAGAGACGCTTCTTATTGAAA GAATACAAAAGCTTGCTTTCTAGCGTGGAAATAGCCAAAGGAAACCTTAAACCTCCAAAGAGCGGCTTTTACAAGGC TTAAGCACGAACGCTCAAGTCAATGATCGGAGGAACACGCTTCTCTATCGTGTGGAGCAAAAAGCGTGGCTTA TAAATACATCGTTTCATTAGCGAATTTA	2024	NEVYRLKKLSTFQELVSYYGMVLNAE VAETLEEVEKGYKHFQNALMKQKVG QIARVETLGAQVAYDKAHIASV/KAKDV LEVSQLSFNSILSSKDDLVPSKLEIRT EKNLPDLSFFVSSSLNSYPVLKLTENQI QISKENTKLQIAKFLPQVSFFGSYIMKQ NNSVFEDMIPSWFVGVAGRMPIILSPTG RIQKYQASKLAELQVSSEIQI/KKNME LLVNKTYKETLSYLKEYKSLSSVELAK ENLKLQEQAFLOGLSTNAQVIDARNTL SSIVVEQKSVAYKYIVISLANL

HP0263	2025	CGCATTATTGCAAAAAGCCCTCAAACTCTACGCTCTTTAAAGCCTTTAGAATTGAATGTGAGCATAGCCTCTAGCTT TTCTAAATAGGGAATTTGTTGGTAGGGAATTAGAAATCCTTTTGGGTGAAATCCAGCCCAAAACACCCGTCCTTT AAATAGTGAGAACTTTATTTAAAGCTTTTCCAAAAGGCGTTATCGCAAGGATTCATCGGAATTCGTGCTTTGAA GTCCTTAGCTTGAATGAAAAGATTTTGA AAAATCGCTCTGTTTGAAGAAATCTTAATAAGCTTAAAAATTCG CTATAATAAAATTTCTTTAAACGCGCCATATCCCCACAAAACGCTAGAGAAATGATAGAAAACGACAGACATCAAT TTAAAGGAACCTTAAGAAATGAAAATCAGCGATCTTATAGATGCTTGCATGAAAAAATTTGCCCTAAAGAGAT GATTTCAAAAGTGATTCAAGGCTGTTTAAATGGCGCAAAATGAGTTAGACCCCTAGCAGCTACTTGGTGG TTGAAGAAAACAAGCAGCTCCAGCTTATCCAGTTGGTAGAAGTTTAGAAGATGGTGAAGATTGGTTAACGAC CCTTCTAAATACATCAGCTGTCTAAAGCCAAAGAAATGGATCCAGGTTAAGATTAAAGACGAATTTGCTCTATAGC TTGAGTTTGGAGAGCATGAACAAGGAGCGATCAACGCGCTTTTAAAGATTTGCAATACCAGTTAGAAAAGCGTTA GAAGACAGCCACTTTGAAGCGTTTCAAAAGCGTCTTAACAGCGTTTAAATGGGCAAGTGATTTAGTGGATCACAA CCAAAACACCTTTATTGAGATTGAGCAGCAATTTCAAGGCGTCTTCCATGCGCCATCGCATCAAGGCGGAGATT TTAAAGTGGCGATAGCATTAAAGCGGTTTAAAGCAAGTCAAAAGCAGCAAAAAGGCTTATTATTAGAGCTGAGC CGCAACCCCTA	2026	ALLQKALKLYALLKPLELNVSIASSFSKI GNLFGRELESFCVKIQPKNTRALNSEK LYLKLFGKGVIAVISCEFCFEVFSLNE KDFEKIALVLEEILNKA
HP0224	2027	AGAAAGCAGGATTGAGCTATTTGTTTATCAGCCATGATTAGATGTGATCAAAAGCGTTTTCGATAAGGTGTAGT GATAAGTGAGGGGAAAGTCGTAGAAATGAACACTATTAAAGAGGTGTTTGATAACCCCAACACGCTTATACAAAGC GTTTGTAGAAATCCAGGCTTAAAGCTTTATCTAAAATCTATGCTTTAAAGCGTTTAAATCGCTTTTAAATGAATGTT ATCTTGGCGGTTATCTTTAGTTTATAACAAAACAAAGAACTTGATAAGGCGCGTTTGAATAAGGGTAGTT GTCAATAAAGAAATGAAAAGACCTTAGATTCTTTGGGCAAAATCTTTTAAATAATTTTTCATAGCTTTTGTGACAA ACCATTTAAAGCATGCTCTTCTACAAAATGTGAGGGTTTAAAGCACTTCTAGGCGTAAACGCAATTTGTTTAGAGT AAATTTGGAATGGTTTGACTCCCACTTGCAAGAAAAGCGGTTGCTGTAACCTAAAGGTTAGCGTGAAGATGC GTGTTTCTATGGGTAATCGCTGAGTGAGTAAATGTTCAAAACAAAGGATGCTTAAACGCAACCCCAAAAAG CTGCTGTTGCTATATAGCTAGCTAAGCGGTTTCTCAAAAGCAGAGCCAAAGAGCAAAATCGCGCAAAAAGGATT AAAAGCTCGCTATTAAACGCTGATTAGATCGCTTGACTTAAATCCCTTAAAGACTCCAAAAGCTTGGATA AAGGCAAGAGATGCGATGCGTTTAAAGGCTCTTTAGCTCGGCAATACTAGATTAACTTGTCTTTAGTGCAATC CAAATATTAGGCACAGCCCACTGGAGTGAGCATGATTGAGCGTTATTGTCGTTTAAAGGCTTCAATAAAGCTGG CCTTGAACCTCAATTTGGCGCAGCTTAAAGCTTGTGCTCAAGCTTTCGAAATGCTTAAATAGCTTGAAGATTT GCCTTAG	2028	EKQDLSYLFISHDLVDVIAFCDKVLVISE GKVEMNTIKEVFDNPKHAYTKRLLES RL
HP0224	2029	ATTTGGCGCTATTATATTGGACCTAGCTGAGGGTTAATTAAATATTATTAGTGAATTCAGGAGTAAACATG GCATTGTATGACAGAGCGAATTCGTAAATCGGTATGCAGAGATTCTTTATTGCGTGAAGCGAGCTAGTAGTTT GTTAAACGACTTACAAGTCTTTGCGGGTAGTTTGTATTAGCGACTATTGGGCGTTACTAGGTTAATGAATTTTC AAGCGTAGTGCAGTATAAATGGGTGTTTATCGCTGAAATTCGCGGTTTGTGTTGATGTTTCTAAATCTAA ACCCGGATTGAATCTGTTTCATGCTGTTTGCCTTCACTTCAATATCAGGGTTACGCTAGTGCCTTGTGGGTATGGT GATTGCAAAAGCTGTTTAGGAGCGATTGGCAGGCTTGGCATGACAACATTTGCTTTGGTTGATGAGCGTGT ATGCCCTTAAGACTAAAACGATCTAGCGAATATGGTAAATGCTCTTCATCGCTTGTATTGTTGGTGGTGTGT CGCTCATTAACCTGTTTGGGCGAGCCCATGTTCCAGGTGTCTATTGCGGAGCGAGTGGATTATTTCAGTCTTT ATATCGCTTATGACACCCCAACATCGTTAAAGCATGTATGATAGCCCATGATGCGGCGGTGAGCTTGTATTTA GACTTTTGAATGCTTTATTCTATTGCAATCATTTGTTTTCAGACAGAGACACATAGTTGAAAAATAGG GGGGACGCCACGCAAAACCTAATAAAAATACCTTTAAATAATTGATAACGCTTCTGTTTACATTTCTTTTAAGGAT TAGTTATGCTTAAACGACCGATATTTCCAACATTTCTACTGATAGGATCAGGCCCTATTGTGATCGGACAAGCTTGG AATTTGACTACTCAGGGACTCAAAAGTTGTAACACCTTAAATCTTTAGGTTATAGAGTGATCTTAATCAATCTAACCC GGCCA	2030	FCAILDLAVGLIKIY

HP0224	2031	CGTTACAAGCTTGCAATCGCTTGCAAAAAGCTTTTCAATAAGAGCATGGTTTAGAAGATAAAGACGCTTTTGCAAG CTTCTATCATCAACAGGAATGCGAGAAATGTAGAAAATGCGAGTTTGTAGCCTCCCTTTGTTGACACTCAGC TCAACATTGCAATCAATGATGAAATTTTCCATGATTGTGTTAATCCGTTGATTATTGGAAAATGTGGCGAGTT TCAAGCTTATTGGAGAAAATTAACGAAATTAAGGAATTATTAGTTATTGAGTGAAGCCTTTCAAACCCCTAAA GCCTTCATGCCAAGTTTTCAATCAAGCCTTAAGATTATTAGCGGCTTGAAGGCTTAGAATTCAGCTCTCT AGTTTAGAAAATTTGATTTTCCATAAAAGAACGATCCTAGAACGCTATTACAAATAGCCCAAGTAATAGCCCA AGTCTGTAATCCAGGCTTTGTAAGGCTCTTAAGGCGGTTTCAAAATTTAAATGGAGTTTCTCGCTAACGACTT GAAAAGCTCAATCAAGCCCAATAAAGAGCGCGATAAACACGCTTAAGCGGTGATAGAGATATTGTAATAGATTTTTC TTAAAGGGTTTTGAACGCCAGTCATACGCTTGAGCATGAACGCCCATCTAAAGTGTCAAAACAACTCATGCCA GCGGCAAAAAGATGGGTAAGAGAGCATGCCACCATCTACCTTTAATCGCGCTGCTAGAGAGGCGCAAAAGCG CGATTTCACTAGCGGTATCAAAACCCAGCCCAAAAGAAACCGATAGGATAATATGCCACGACTTGGAGACAAA TTAAACAAGGGTTTAAAGCGGTTGAGCAAGCCCTACTCGTTAAGAGCCGCTCGATCTCTCATTTTGTGCTG GCTTAGGCTTTTATTAGAGTGGGATTTTTTGAATATTTTTAATAATCCAAGAGATAATCGCATTCATAGCCCTATA ATGAGCAAAA	2032	LQVLQIACKKLFNKSMGLEIKDALQASI IKQELREIVENCQFLASPLFUTQLNAIN DEIFSMIVNPLDLLENVGEIYQAYLEEK LNEIKELLYLSESLSNPKAIFMPSFSN QSLKDLLSDNLRA
HP0224	2033	GCAGCGCAAGCGGTGCCCTTATTAAAGAGCGACGCTCCCATTTGAGCACGGGATTGAAAAAATTATTGCTAGG GATCTTGGGAGCGATCAAGCCCAATCGCGCAGCGGTGTAGAAAAAATTGATTCTAAATATTATTTTAGGC GAAAGCAAGAAGAGCCTATATTGATCGGTATCTTGCAAAAAATCTGCGCACCAACCAAAACACCGATTTCAAT CAAGTCCCTATCGTTAAGTGGCGATAAAGTGGAGCGGCAATCATCGCTGATGCGCTAGCCTAGCATGGATAGAG GCGAGTTGGCGTTAGGGAAAAATGTGCGGTGCTTCACTTGAATGGCTATAACTTTGAAGACGCGGATCGT GGTGAAGTGAATCACTAAGATGATATTTTCACTTCCACCCACATTTATGAAAAAGAGTGGATGCTAGGGAGC TTAAGCATGGTGTGGAAGATTTACCGCTGATATTTCTGATGAAAGAAAGCGCTCGCTCATCTTGATGAAAGC GGGATCGTTAAAGTCGTACTTATGTAGCGCTGGCATGATTTGGTGGGCAAACTTCTCCTAAAGCGGAGATTAA AAGCACGCTGAAGAGCGGCTTTAAGGGCTATTTTGGGATAAAGCGGCGCATGTGGTCAATAAGAGTTGTATT GCCCTCCAGTTTGAAGGCGACGGTGATTGATGTGAAGTCTTCACTAAAGGCTATGAGAAAGACGCGCGAGT TTTGAGCGGTATGAAGAAAGAAAGCCAAAGCTTGATATGGAGCATTTTGATCGCTTGACCATGCTCAATAGAGAAG AATTGTTGCGGTTAGCTCGCTCTTCTCAAGCGATTTTGAAGAGCGCTTTCAGCCATAACGCGCAAGGATTATAAG AAGCGGATCAATCCCTAAAGAAAGAAATCGCTTCAATCAACCGCTTCACTTTGGCTAGTTTGGTCAAAAAGTATTCTA AAGAAAGTGCAAAACCCACTATGAA	2034	QRQAVPLLRSDAPIVGTGIEKIIDSW GAIKANRAGVVEKIDSKNIYLGESKEE AYIDAYSLOKLNLRNTQNTSFNQVPIVK VGDQVAGAGQIADGPFMDRIGELALGK NVRVAFMPWNGYNFEDAINVSECITKD DIFTSTHIYEKEVDARELKHGVEEFTAD IPDVKEEALAHLDSEGNKVGTYYVSAG MILVGKTSPPKGEIKSTPEERILLRAIFGD KAGHVNKSLYCPPSLEGT/IDVKVFT KKGYEKDARVLSAYEEEEKAKLDMEHF DRLTMLNREELLRVSSLLSCLALEEFPS HNGKDYKEGDQIPKEEIASINRFTLASL VKKYSKEVQNHYEITKNNFLEQKKVLG EEHEEKLKSDILPNGVIKKVLYIA TKRKLKVGDKMAGRHNKGIVSNIVPV AD
HP0109	2035	CCAAAAAACCTTTTCAAGCCCTTTGGGTTTGGTTTATCGTGGATTATCGGCTATTGTCTTTGCAATTAGG GATTGAAATGCCCTTAGTGAGGAATGTTTTACACCTACAACCAACCATCAAGAAAGATTCAAACCCAGATTAAACGC TAATCTTTCTTAATCGTTTGTAGCCCTTTTCCCTTTTAAATAAGCCCATGATTTTCTAGGGTATTTTAA AGCATGGAAAAACATTCGCTGAATCGGTTTCTTACATGCTCTTATGTTTCTTATTCCTTAATAAAGGCTTTT AAACCCGCTCGGCTAACCCACCGGTGCGCATCACCACTAACACTCTTCAATAAGAAAGCTTATTTTGTGAC CACAAACAAGCGGATGATCATCTCAAAATCCGCTGAAATCTTATAATCGGTTTGTATAAGCGGTAGCGTTCATAAT GGCTTTTGTACAAAAGCGTGGGTGCGCTGGCACTACGCCATAAAGCAAGTTTTAGGGTTAAACTCCCGGATCT CATAATAGCGCACCTTTTCTAAACAATCAGGTTTGACAAACACCGAGATCGGCATACAGGCTATCGCAATTTTTC TTTCAAACTCATGCCACCTTTTCTACCACAACTCATCTTTGTAAAAATCATCGCTATTCAATAAAGCGATAATCC CCACTAGAAGCGTTTATGCCCTTATCATAGCGTCATAAATGCCCTCATCTTTTCACTCATACGCAAGCGATTAT CTCTATGTTTGAATGATTCTAAGTGTATCCGCTAGCCCGCTCTATAATGATGATTCATGTTTATAAGTT TGATGAAGCACGGAAGATGGTGTCTTCAATGGTTTTTTCGCTATTAAACACGCGGTGATCACAGAACTTTTAAAC AATCCAAACCTTTTATAAATAAAGTCCCTGATTAAAGTTTAAACAAATTCAGTTTGTCTAAATTCATGGTCTTC	2036	KKTFQAPLRFQFVDFIGYLSLQGLIE MPLVRNVFTYNNHQRERFKPRFNANL SLIVSF

HP0109	2037	CGCTATACAGAAACGCCCGATCGCATTTTAGGAGTGAAGTACCCAAAGCCTTAAACGAAGCCACCGCAGGAGC GGCCTTAAATATCACATTAAAGAGCGCTTGAGAGAGCCACTCAATAAGCGATTTTAGTAAAGATTTAGAACTAAG CACACAAAATCCACTTTAGCAACAACACGCTTAAATCATTTGAAGAGCTTAAACAGCGCTCAACAAAGCGAGCG AAGAAATCAAGAAAAGCGCGGATTTTCTAATCAAAAACCTCACTAACGAGCAATCAAGATCTATTAAATAACG CAGAAATCCCTACAAAGCGGAGAGCGCTATCACCTTTTGGAGTGAATAACCTAACCCCTGAGATTGTTGAATTCCTG CACAAAACAACAAGAAATGATTATAGAAAAGCCTCTAACAAGAAATTAGAACTTTTAAAGACGCTAACTTTAAAC ACCCTGAAAACATAAGGGCGAGTTTAGATCATGATGCTATCGCTCACATACCTCAAAAGGCATGGCGTTAATCTGTTA ATGTTAGAAATGGTGAGATCCCTATTACGAACGAAGATATTGCTAATTATAGATATATCGTTAATAACGCTGATGCAAT TCTTAGGACTTTAGACAACGAGATAAAGAACTTATAAGCGCGTTTAAACAAATCAACGGCTATGCGGTAGTCGTGG AGCAAGCGATCAATAAGAAAATGAATTAGTTTG	2038	RYTETRIAF	2040	GESADEMLETIAHTAPLLPKDKPRYLM GVGTPENILDALSGLGVDMFDCVMPTRN ARNATLFTHSGKISIKNAPYKLDNTPIE ENCACYACKRYSKAYLHHLFRAKELTY ARLASLHNLHFYLELVKNARNAILEKRF LSFKKEFLEKYNRSRSH
HP0261	2039	GGGGAAGCGCTGATGAAATGCTAGAAACCATCGCGCACACCGCCCTTGGCTCCCAAGACAGCCCTCGCTACT TAATGGCGGTAGGCACGCTGAAATATCTAGACGCTATCAGTTTGGGGTGGATATGTTTGAATGCGTGATGCC ACCAGAAACGCCAGAAACGCCACCTTTTACGCAATCTGCGCAAAATTTCTATCAAAAACGCCCTATAAATTGGAT AATACCCCTATTGAAGAAAATTGGCGATGTTATGCTTGCAACGCTATTCTAAAGCCTATTGACCATTTATTAGGG CTAAGAAGCTCACTTACGCTCGTTTGGCAGCTTGCACAATTTGCAATTTTATTAGAGCTGGTGAAGAACGCCAGAA ACGCCATTTTAGAAAAGCGGTTTTGAGTTTTTAAAAAGAAATTTTGGAGAAATACAACTCCCGCTCTCATTTGAATGAT GGAATGCAAAAATACTAAAAGCGTTTTTACCATCAATAAAAGTTTTCTTAAAAATAAGGCTTTAGTTTTTAATTTTG ATTAAACAACCCCTATCTTTGATAAATCTCAGGGTGGTGCTTT	2042	AKEDALKARKKLLNTHDFLEDLIFRKQ KIKELMDHRAKVLSDLENKYKKEAL EKETRGLTAKSKAYGDLEQALKDNP LYRKLPPNYAYVLNQETFTKEDREL SYYPQVKTSIFKKTATTTKDKAQALL QMGVFSLDEEQNKASRLALSYPQAI EYSNNVSNLSRKELDNIDYLLQLERN KFDSKAKDIAQKATNTLIFNSERLAFSM AIDKINEKYLRYEAFSNNLKNVKDDVE LNTLTNFTNQKLSFAQKQKLCLLVD SFNFDTSKKSILKKTNEYNIFVDSOPM MSDKTTMQKEHYKIFNFFKTVWSA		
HP0261	2043	GATCGGAACCATAAATCATTTCAATAGAAACCAATAGGAGCGTTACTTGGTCTTACTAAGCGATAAATACGGCCTG CTTTTAGACAAAATAAGCCCAAAACATCTAAGAAGAACTGATTAAAGAGCTGAAATAATATAAAGAAATTCAAAAT TAGGAAATTTATGCGCGGAAATTTCTAACTACAACTGCTAAGTTAGGAAAATTTGACCCCTGTGGATCATTCTA ACAGGAATTTTCTTCTCTCATCTGCTGTTTACACTGGTTGATTATTTTATTGAAACACAGAGAAGAT TTTTTCTTCAAAACCCCAAGCTTGTTAAATTAATCTGAAATTTATGGTTTTTAAAGAGGCGCATTCGCAAGATC CCAGTAAACACCCAGGGCTCTCT	2044	DANHIISIETNKERYLVLLSDKYGLLD KISPKTSKEELIKEAENNIKNSKGLNLYA GKF		
HP0261	2045	TTTAGAATATAGCCGCGAGCGTGTTTGAAGTGGTGCAACAATACTACGAGTATTTAAACAATCTCGCTCGCAT GATCGCTTTGCAAAAATAATAGAGCAAAATCAAAACGGACATTAAGGGTTACCAAGCTCTATGACAAAGGGCTGA CCAGGATTGATGATTGCAAGCCCTAAAGCGCAAGGGAATTTGAGCGAATACGATATTTGGACATGCAATTTGCTT TGGAGCAAAACCGCTTGACTTTAGAAATACCTTACCAATCTCAGTGTGAAAATTTGAAAAGACCCAGCATTTGATCGCG CTAATTTGCAATTAGAGAAAGGACGATTAGTTTCTTTAAGGGAGCAGATTTCCGCAATCAGATACCAAAACAAGC AACTCAATTATTACCCCAAGATAGATGTGTTGACTCATGGCTTTTGGATCCAAACCCGCTTATGCCACAGGGC GTTTGGGAATTTTACCCCGTCAGCAAAATACGGCTGGGTTACTGCGACTTTGAATAATTTTATGATGATATAGGCT TGAGCTTGCAAAAACAATCCATCATGCTAGGCCAATTAGCGAATGAAAGAAATTTAGCGTATAAAAAGCTAGAGCAAG AAAAAGACGA	2046	LEYSRQSVYLQVQYQYQYEFNNLARMII ALQKLEQIKTDIKRVTLYDKGLTTIDD LQSLKAQGNLSEYDILDMQFALEQNRL TLEYLTNLSVKNLKTITDAPNLQLRER QDLVSLREIQISAIRYQNKQNLNYPKIDV FDSWLFWQKPAYATGRFNGFYPGQQ NTAGVTATLNFDDIGLSLQKQSIMLGQ LANEKNLAYKKEQEKD		

HP0261	2047	CCCCATTGATGAAGTTTGATTAAAGAAAGTTACGCTTCTGGTATCAATACGAAGACACTAAAGAGTGCAACT CCACCCCTTATGACGGGCAACGACCCGCTATACCGGTTTAAAGACGCGAGCGTGGGATTGAAATAAA ATCATCCCTGCTAAAGTCTTGACACTAAATAATAATCTTGATAAAATCGCCAGATACGATAGTAAAGCCCATG GAAGTAGGTCCTTAAAGTCCGTAGTGGTGTAGGTTAGCGGGGAAACCCCTTATGTTACTGAAGTGGCTACGAAGTT TTTAAAGACACTAACTGCCCTTAGAGCGCTTGTTCACCGCTTGGCGGAACAGCTGCAAGGTGATTGAAGCTA AACGATCGCTGATAATGCCCTTTGGCGTTTGGCTTAGTGGTAAATCTAAAGCGATCAAAAGCACTTGTGCT CCTTATCACATTGATAAAATCAAGATATAAAGGCGCTACATTGGTCAAGTCCAAAGGGCATGCTAAGCCATTG GGTGGTATTAAACCGCGGTGGTGAATAATATCAAGCGGTGGTGCCTTCTACTTGAATGCAGGCGCTAGAGAT TCTCAAAATCAAGGGGGCTTATGAATGAGCTTGAATGGCACTAAATCGCTGATTTAACCAGCGCTTTAGAAATC ATTAGGACTATCCATCTTTTACCCATGCAATCGCATGCTCGGTGCATGTGATGGATTTTAAAGGGCAGCTTTAAAC GAGTTTAAAGTAGAGCCTAATTTCCGCTAAATCTAAAGGGTTACGCATGGATAAATGAATAAGGTCGTTTACAC AAGAATATTCGGGTTTGTGGCTTTTCCATTGGGTAGGCTTGGATTTTCGCTTTAATCGCTACAGGGTTT ACATCGCTTACCCCTTTTTCAGCCTAATTCAGCTTTTATAAAGGGGTGATCTTTTACAAGCTTATGTGCGTCTTT TCAATGCTATGTTGGG	2048	PIDESLIKEEVTHSWYQYEDTKEVQLH PYDQTNPHYTGLKDGESVGIENKIIPA KVLDTKNKYSWIKSPRYDSKPMVEVGPL SSVVGLAAKNPYTEVATKFLKDTKL PLEALFSTLGRTAARCIETADNGLL AFDALVENLKSQDQSTCAPYHIDKNQY KGRYIGQVPRGMLSHWVRIKNGVVEN YQAVPSTWNAGPRDSQNJRGAYEM SLIGTKIADLTQPLEIIRTIHSFDPCACS VHVMDFKGQSLNEFKVEPNFAKF
HP0261	2049	TGAAGCTCAAAAAGAAACCCCAATCCAATCAAACGCTTAAAGAAATGAAAGTCAAGTCCATTCTTATGTCGGGCT TTCCTTACATGCTGACATGCTCGCTAATGAAATGTAAGATTCTGTGGCGGATATTGTGGATTCTAAAAAATAGA CACCGCTGTTTGGCTTGTTCATCAAGGGTATTTAAAGACGTTTATGCCACTTTTGAAGCGCGCATATTAGAGTT TCATTTTGTATGAAAAGCCAGGATTGCCGGGTAGAAATCAAGGGTTATGGGACTGAAAAGGAAAAAGACGGCTTAA AATCCCAATGGGATCAAAAAGGGCGACACCTTTGATGAGCAAAATAGAGCATGCTAAACGGCTTTAAAAACC GCTTAGAGGGGCGAGGCTATTATGGAGCGTGGTGGAGTGGCGACAGAAAGTCAAGTGGGTCATTATTG ATCGTGTGATGTAATAGGGGGGATAGCATTTATATCAACAATCCATTATGAGGAAAGCGGAAATTAACCGC CGCATGATTGAATCTTTGAGTGGCAACAGCAACGAGATTTCATGGCTGGATGTGGGCTTGAATGACGGGAAAT GCGTTAGATCAACTAGAAATACGATTCTATCGGTATCCAGATGTGTATGCGTAGGGTTACTTAGACGCTCATAT TTCCTCGCTTTTGAACCGGATTTTCTACCCATGACGCTAAGCTTCAATTATAAGTCAAGAGGGGATCCCAATAC AGGATTCAGACATTTAATAGAGATTGACAAACCGGTAGTCCCTTAAAAACCTTAGAAAAAGCGCTTAAAGTGA AGGAAAGATGCTTTAATATTAGCATTTAAGAGCGGATGCGCAATTTTAAACCGGAAATCGCCGATAAGGGTTAT GCGTTGCGGTGGTGAAGCCAGACTTGGATAAAGATGAAAAAACGGGCTTGTGAAAGTCATTTATCGTATTGAAGT GGCGGATATGTTGTAT	2050	EAQKETPQSNQTPKEMKVKSISYVGLS YMSDMLANEIVKIRVGDVDESKIDTAV LALFNQGYFKDVYATFEGGILEHFDDE KARIAGVEIKGYGTEKEKDGKLSQMGI KKGDTFDEQKLEHAKTALKTALEGQG YYGVSVEVRTEKVSEGALLIVFDVNRG DSIYKQSIYEGSAKLKRRMIESLSANK QRDFMGWMLNDGKLRDQLEYDS MRIQDVYMRRGYLDHAISSPFLKTDfs THDAKLHYKVKEGIQYRISDILIEIDNPV VPLKTEKALKVKRKDVFNIEHLRADA QILKTEIADKGYAFVVKPDLDDKDEKN GLVKVIYRIEVDGMVYINDVIISGNQRT SDRIIRRELLGPKDKYNLTCLRNSENS LRRLGFFSKVKEEKRVNSSI.MDLLVS VEEGRTGQLQFGLGYGSYGGLMLNG SVSERNLFGTQGSMSLSLYANIATGGGR SYGMPKGAAGRMFAGNLSLTNPRIED SWYSSTINLYADYRISYQYIQQGGGFG VNVGRMLGNRTHVSLGYNLNVTKLLG FSSPLYNRYSSVNEWSPR
HP0261	2051	CGAAGCGATCGCTCTAAAGAGCTTCAAAGGCTGAGATGGAGCGCCAAATGATCGCTTAAAAAAGAGTCTTGAAA AAATCGTAACGAAAGTTTGGCGCAAGAAAGTCTTAAACCACTACCGCAAGTCTTTAGATCATTTGCAAAAAAAGC GATCATTTTACAAAAGAGGGTGTGATACGCTTTTACAGATTCTCTTTTTCACAAAGCCCTAAAGGGGAGAAATTT AGCCTCTTCTAATGATGTTGTTTGAAGTGGCGTTTGAACCTTGACCAAGCACTCTGTCTAAATGTGCGCAACT GAGCCAAAGAAAGAAAGAACTCAATACGCAAGCTTTAAAGTCAAAACAGCAATCAAAATCTCATCATCATAGAG TGAGCAAAAACCTCGTGAAGTAACTTAAATCTTGAACACCGCAAGATAAGCTCATTTTGAAGCATGCAAAAAGA TTATGCGATCTCAACCAACGCTTAACTTTAGAAAAAGAGCGCCAGAAATTTTAAACGCTCTTTTAAACGCTTGAA TATCATCAACAAACAGAGAAATGAAGAAAGTCAAGTTTGAAGAAATCTTCAAGCCTTAGAAGTCAAAACAAGT GGTAGCTCTTATCAAAATATCAACACCGAGCTATACGGACCAAAACGATCGCTCCCTTGAACGATTATGAAGT GGTGCAAAAATTTGGCCCTATATTGACCCGGTTATATTTAAAAATTTTAA	2052	EAIRSKELQKAEMERQMIALIKSLEKN RNESLAQEKVLTNYRKSDFLQKKRSF LQKRVFDTLQDFLFSQALKSQNLASS NDVVLQVAFENLHQSTLSKMSQLSQE EKELNTQALKVKNSIQKISSIDEQKTRE VTLKSLKTEQDKLILSMQKDYAIYNQRL TLLEKERQNLNALLKRLNIKQJNRENEE KVSLKSSQALEVKQVASSYQJNINTTS YNGPKTIAPLNDYEVVQKFGPYIDPVY NLKIF

HP0261	2053	CAGGGATCTCTACAAACCTTATTGATTGATGACCATGATGCGGGTATGCCAGACAAATGATTGATAACACAAAGCAC CGGTGAATCACCAGCAATGAATGCGGCCACTACACCTTAAACAACATAGCCAGTTTAGAGCATAAGACAAAGCA GCTTACAACTTTGAGCTTGAGTAATGCGATGATCTTAAATCTCGTTTAGTCAATCTCTCCAGAAAGCACACCAATA ATATTGACTCATTCGCCCAACGCTTACAAGCTTAAAGACCAAAATTCGCTCTTTAGAAAGCGCGCGGAAGTGT TGATCAATTTGCCCTAAATATGAACCACTACCAATGTTGGGCTAACGCTATTGGGGACGAGCTTGAATAATG GCGCAACGCTTCAATTGATGGCACAAGTGGGGCGTAGATGCTTACCTTAATGGGAAAGTGGAAAGCCATTGTGGG CGGTTTGAAGCTATGTTATAGCTCTTTAATAATCAAGCGAACTCTTAACTCTGGAGCCCAATAACACTAATTTT GGCGTGATAGCGGTATCTTTGCTAACCGCATGAATTTGATTT	2054	RDLLQTLIDSHDAGYARQMIDNTSTG EITKQLNAATTTLNINIASLEHKTSSLQTL SLSNAMILNSRLVNLRRHTNNIDSFA QRLQALKDQKFASLESAAEVLYQFAPK YEKPTNWWANAIGGTSLNNGGNASLY GTSAGVDAYLNGEVAIVGGFGSYGY SSFNNQANSLNSGANNTNFGVYSRIFA NQHEFD
HP0261	2055	AGGGATTTGGTGGGATTTGATCACCGAAGTCAATGGGAAAAGGTTAAACACACGAATGAGTTAAGAAAATCTAAT CGGCTCCATGCTACCCAATCAAGAGTAACCTTAAAGTCAATAGAGACAAAAGAACGCGCTTTCACCCCTCACTCT AGCTGAAAGGAAAACCTTAACAAAAGAAACCAATTTCTGCTCAAAAGCGCGCAAGGCCAATTGAACGGGCTTC AAGTAGAAGATTTAACTCAAGAAACCAAGGCTATGCGTTGAGCGATGATGTTCAAGGGGTTTAGTCTCTCAAG TGAATGAAAATTTCCCGAGAGAGCAAGCGGATTTAGGCAAGGTAAACATTATCACAAAATTGAAGAGGTTGAAGTT AAAAGCGTTGCGGATTTAACCATGCTTTAGAAAAGTATAAGGCAACCAACGATCTTCTAGTTTAGACTTGAAT CAAGGTTATAGGATCATTTTGGTGAATGATAGGGTGGTCTGTTAGTCGATGCTTTGATTAGAGTGAATGGGA AGCTTTAACTCTCTTTAGAAAAGTTTAGAAGAACGCTTTGAAACTAAAGAAACGCTAGAAACGCTTATCAACAA ACGAGCGTTGTTTATTGGCTGCTGGGAATCTAGG	2056	GILVWDLITEVNGKVKVNTNIELNLIGS MLPNQRVTLKVIRDKKERAFTLTLAER KNPNKETISAQNGAQGLNGLQVED LTQETKRSMRLSDDVQGVLSQVNE SPAEOAGFRQGNITKIEEVEVKSVADF NHALEKYKGKPKRFLVLDLNQGYRIILV K
HP0261	2057	GGGGAGCCTTCAGCGTTTGAATTTGCAAGTGGGCTACCAAAAAGAACTCAAGCAGTTGCAATCAATAGTAAGAA TTTTCTAATATTTGACCAAAATCCATTCGCAAGTAGAGCTAACACTCAAGCTCAAGAGGTTGAGAAAGCGTTTA TGAGGGCAGGCTAATAAGATTAAGATCTCAATAAGCTATCTTTCCCAAGAAATCCTTACGAGCCTTAAAGC TTCGCAAGAGTGCGAGCTAACAGCTTAAGCAGCAATCGCAAACTTTAGAGGATTTGAGGAATGAGATTCACGCTA ACCAGCAAGCTATCCAGAGTTAGACAAGCAAAATAAGAGATGAGTGAATTTAGCCAAAGTTAAGCCAGGATTTG GTTTCACAATCGCTTAATCCAAAAGCTCTCAAGAAACAGAGGAAAAGCTGAAAAGCCGCTCAATCAAAACGC TCGGGCTAATAAAACCCCTCTTTGAAAGCCGAATCCCAAAAATCAAGAGGAAAACCTCAAGAAAAGCGGAAA TTGAGTTTGATAAGACTTGTCTAAGCAAAAAGAGATCTTTCAAGAGCTCTGCTTTTTTAAATAAATCCTATGC AGAAGCCAAAGAGCGTTTGTGTGTTAGAAAGCCCAATAGTTACAGACTTTATTATGTGCGTTATGTTCTTGGAGAAGT GGCTATGGGGAAGA	2058	GEPSAFDLSGATKELKQLQINSKNF SNILTKIHSQVEANTQAQEGRLSVYEG QANKIKDLNNAILSQEESLRALKASQEV QANTLKQSQSTLEDLRNEIHANQQAIQ QLDKQNKEMSELLTKLSQDLVSIQALIQ KALKEQEEKAEPKLSNAPANKTPSLK AESPKNQEGKTQEKAKIEFDKDLKQK EIFQEALSFKNKSYAEAKERLLWLEA NSYRLYYRYVLGEVAYGEK
HP0261	2059	TAAAGGTGTCCTCAATCCAAACCTGATTATATTTCTAGCATAGCGAATCAGCCCTAGACTGCTCAAGTTATTGAAAA AAACAGATGAATGCAAGCGGATTGAGATCGCTCACTGCTCTCAATCAAGATGATGATCTGAAAGCTAAAGAGC AAGCGCTTATGATTAGGAGCGTTGTATGCAAGGATCAAGGACTTTAAACCGCCACCTTACAATCTGCAATATT TGACGACCATGCGGAAGTGAAGCTTCTGCTGTTAGGGCGCGGATGAAAAGCCCTTTTTCCTATGGAGGG GAACACGCAAGAAAATCGCCACTATGACAAAATCAATCAAAATTCCTAATGAAGCCCTAAAGGCTTT AGAAATTGAAGCCCAACTATTGTTGAAAACAAGCGTTATGCTGAAGTTGTAAGCATGCAAAAATTTGCCTAAGA TTCCCTTTGATCCAAAACCGCTCAATGCTTGTAAACCCCATTAAGAACCATGTTGTGAAGAGCCCTTAA ATATTATCCCAATCACAACTTTGAATTCAGCCCAAGAAAGAAATCCAGCCCTTGAATGCTTGTATTTCCGATCG CTCAAAGAAAAGCGCAATCATTGCCCTAAAGCTTTTAAACGGCTAAAGCCCTAGCGAGAAATTAATATGGCTT TATCGTTTGGGCGCAATTACTACCGCTTAGGGGATTTTAAATTCCTACTGCGCTCTAAAGAGCGCTTAAATCTC GCTCAAAGCTTGAA	2060	KVQSNPDYISTHSESALDLKLKKN QMNASAEIAHLLNQDDDLKAKEQAL YDLGALYARIKDFKNAHLNLYLQDQD AELDKASVVRARDEKALFSMEGNTQE KIAHYDKIQNFNPSNEALKALELKAQLL FENKRYAEVLSMQKNLPKDSPLQKTL NVLAKTPLENHRCEEALKYLSQITTFEF SPKEEQAFDCLYFASLKEKAQIIALNAF KTAKAPSEKLWLRLGRNYYRLGDFK NSTLASKDALILAQSL
HP0261	2061	AAGTTAAGGAATTTCAAGCCCAACCGAGGGCGAATTTGGGGCTTGGGATCACGGTGGGCATCGCGGATGGC GTTTAAACCGTTATTGCCCTTTAGAGGCACTCCAGCTTACAAGGCTGGGTTAAGTCAGGCGGATACATTTTAA ATCAATAACGAAAGCAGCTGAGCATGAGCATGATGCGATCAACCTCATCGCGGCAAGCCAAACCCCTAT TCAGATCACCGTTGTAGAAAACGAGCCAAACCTTAGTGTTAACATCATTAGAGACATCATTAACCTCCCTC TGCTATGTGAAAAGATTAAAGAAACCCCTTATCTGTATGTGAGAGTGAGTGGTTTGAACAAGAAATGTTACCAATC GGTTTAGAAGGCTTAAAGCTAACCTAAGGCTAAGGGATGCTGTTGATTAAAGG	2062	KKEFEQAQTEGEFGGLGTVGMRDGV LTVIAPLEGTPAYKAGVKSGDNILKINN ESTLSMSIDDAINLMRGKPKTPITV RKNEPKPLVFNIRDIILKLPVSVYVKIKET PYLYVRVSGFDKNVTKSVLEGLKANPK AKGIVLDLR

HP0261	2063	AGCTTTTAAATGCTGTTGATGGGATTTCTAAACCGGATCTTTCTTTTGAATTTGGCTGAAGACAGCGCGCTTTG AACCATCTAACGCTCAAAACTCTCTTAAACCGCATGGACTAGGATTTGTCTAACCATGAAGGCTTGCATGC GCAAGAAATACGCCATTAAAGCAGCGAGTAAATGAAATGAAATAGCGGCTAAACTTTCTTTTGGCTCAAAATGATTTGAG CGCTTTTATGTATCTCTCTAAACCCATTAAATGATTTTGGCAGCCAAACACCGGGCTGCAAAAGCCAC CAACAGATCCATCAAGGCATACAAACATCCAGCAAAATATCCCTTCTCAAGTATTAACCCCTCAAAATCCAAGCGGG CATGCAAGGGGTGATGCAAGGTTTGGGCTTTGAGCAGCATTTAGAGCCCTTATTGTTTCTAAGCAAAATG TGGTATTGGGCTTTGAGCATTTATTTATCCCTTATATGGTGGGCAAGATTCACGATGGTGGCATTTGCGGAT TTGATGCAAAAGATGCTAATGAAGTGTATCGTTTGAACAAAGCTTTCCACTTTCAAGAGCTTGTAGCGGTATTAC GGCATGGTGTAAACGCGAGAGTGGCTGAACCTTAGAGAGGTGGAAAGGCAATTAAGCATTTCCAAACCGC TTTGAAATGCAAAAGTGGGCAATCGCTAGGTAGAACTTAGCGGCTCAAGTGGCTTATGATAAGGCCCAT TCGCTAGCGTTAAGGCTAAGACGTGTAGAAAGTTTCGAGCTCTCGTTCAATTCATTTATCTAGCAAGGACGATT TAGTGCCTTCAAGCAAAATTAGAGATCCGACGGAGAAATCTGCCGATCTGAGCTTTTGTCTTCCACGCTCA ATTCTACCCGGTTTAAAGACTTTAGAAATCAGATTCAATCTCTAAAGAAACACGAAATTACAGATCGCTAAATT CTTGCCCCAAGTGA	2064	SFLNAVDGISKDTLSSLNLAEDSAPLNH PNAQKLSLKNWTRVLSNHEGLHAQE YAIKRASKMKLAAKLSFLPQIDLSAFYV YLSNPIKMDFAQKQPGVQKATNQIHQ GIONIQNIPSQVLTPCIQAGMQGVMQ GFGALSSTLEAPLLFSKQNVVIGALSIY PLYMGGARFTMVRIADILMQKDANEVY RLKKLSTFQELVSYYG3MVLNAEVAET LEEVEKGHYKHFNALKMQKVQGIAR VETLGAQVAYDKAHIASVKAKDVLVS QLSFNSILSSKDDLVPSKLEIRTEKNL PDLFFFVSSTLNSYPV.KTLENQIQISK ENTKLQIAKFLPQVSFFGSYIMKQNN VFEDMIPSWFVGVAGRMPILSPTGRIQ KYQASKLAELQVSSECIQAKKNMELLV NKTYKETLSYLKEYKS.LSSVELAKENL KLQEQAFLOGLSTNAGVIDARNTLSSIV VEQKSVAYKYVIVSLANI.MALSDHIDLFY EFVY
HP0261	2065	CGCATTATTGCAAAAAGCCCTCAAACTCTACGCTCTTTTAAAGCCTTTAGAAATGTGAGCATAGCCTCTAGCTTT TTCTAAATAGGGAATTTGTTGGTAGGGAATTAGAACTCTTTTGGTGAAATCCAGCCCAAAACACCCGCTGCTTT AAATAGTGAGAACTTTATTAAAGCTTTTCCAAAAGGCGTTATCGCAAGGATTCATCGGAATTCGTGTCTTTGAA GTCCTTAGCTTGAATGAAAGATTTTGAACAAATCGCTCTGTTTGAAGAAATCTTAATAAGCTTAAAAATTCG CTATAATAAATTTCTTTTAAACGCGCCATATCCCCACAAACGCTAGAGATGATAGAAACGACAGAACATCAAT TTAAAGGAACCTTAAGAAATGGAATAATCAGCGATCTTATAGAAATGCAATGCGTATGAAAAAATTTGCCTAAGAGAT GATTTCAAAAGTGATTCAGGCTGTTTGTAAATGGCGCAAAATGAGTTAGACCCCTAGCACGCTACTTGGTGG TTGAAGAAACAAAGCAGCTCAGCTTATCCAGTTGGTAGAAGTTTGAAGATGGTGATGAAAGATTGGTTAACGAC CCTTCTAAATACATCAGCTGTCTAAAGCCCAAGAAATGGATCCAGCGTTTAAAGATTAAAGACGAATGTCTCTATAGC TTGAGTTTGGAGAGCATGAACAGGAGCGGATCAACCGCTTTTAAAGATTGCAATACCAATACCAATAGAAAGCGTTA GAAGACAGCCACTTTGAAGCGTTTCAAAAGCGTTTCAACAGCGTTTAAATGGGCAAGTGATTTTAGTGATCACAA CCAAACACCTTTATTGAGATTGAGCAGCAATTTCAAGGCGTTCTTCCATGCCCATCGCATCAAGGCGGAGAGTT TTAAAGTGGCGATAGCATTAAGCGGTTTAAACGCAAGTCAACCGCACGAAAGGCTTATTATTAGAGCTGAGC CGCACACCCCTA	2066	ALLQKALKLYALLKPLELNVSIASSFSKI GNLFGRELESFCVKIQ?KNTRALNSEK LYLKLFOKGVARIISCEFCFEVFSLNE KDFEKIALVLEEILNKA
HP0261	2067	GATGAAGAAGTCATGGCGTTGCTCATCGCTTGGAAATACCGCATCTTGTTTTACGGCTTTTAGAAAGCCCTTTAATT TCTTTTAAAGCATTTTGAATCCTTTCTTAACACAGAAACCTTTGAATAATTTCAACGATTTAAACACGCTCTTTTTTGA AGTCCTAGCCAAAGAAACAGCGGCGCTTACAGAAATTAAG	2068	DEEVMAIIAWNRIILFLRLLESLLISFK HFENPFLTTFENFENFDNLNTLFFEVLAK KNSERLPEIK
HP0261	2069	TCCTTGCAATGGATGAATTTTAGACGATTTGCAGCTTTCAAGGGAACGCATCAACGATTTAGAAAGTGGTGGG AGTGAATAGGCCCTGAAGAAAGAAAGAGAGGCAATTTTCCAGTCGTTGGATGCTGCTGGATTACCGGGCTTC AAAAAGCTTTATCATCGGCTTATCCCTAATGACTACCCGCTAGAAATCCCTATCGGCGGTTTCAGCCGCTTTAATA AAAGAATCCACCTATTTCATGTGCTGTCACAAACCATACCGGCTTGAATTAAGCACCGCTATTACACCCCTGTGT ATCGAGCGCGAGCGGGTAGTAGGTTAGCGAGCAAGGGTGAATGGGGGTATGGGAATTTGATTAAAGTTT TCCACCCCTTTTGGTTTAAACCTACTACGCCCATTTGAATAAAATCGTCTGTAACGCGCGAATTTGTCAAAAAG GGCA	2070	SLQMDEFDLDLQLSGERINDLEEYVGV NRPEEKEEGNFSSRLDVAGITGLQKS FIMRLIPNDYPLESYRVRVSAFNRHPI LHVLHNTGLDLSAINTPVYASAGV VGLASKGWNNGYGN.LKVFHFPFGFKT YYAHLNKIVWKTGEFVKKG

HP0902	2071	CCGTTGGTGAATGAAGACAGGTGAAGGGTTGTGATATTGCGTATCGGTATGCCCTGCTGGGTTCTTGCCAT GGGATTGAAAAAGAAAGGGTCTTGAAAGTGGCCAAAGTAGCCTACCCAGAGAGCTGTATCGGTTGCGTGCAA TGCGAGTTGCACTGCCCGGATTTGCGATTATGTGCTGACAGGAAGATTCAAATTCGTAAGTTTCTAAAGAA GCCAAGAAAGAGCGAAAGGTTAAGGCCAATAATACATGCTCTTAGAAGAGACTATTTAGAAGGGAGAGACAA ATAATCGGTGAGATTATTTCTGATGGGAATGAATAGTCGCTAAAGCGGAGTTGAAGTGGGTGCTGGTTTTTGG GGCTATCCTATCACGCCAAGTTCCGATATTATGCATGCGGTGGCTTACCCAAATCGCGGCTCATTTTA TCCAAATGGAAGATGAAATCAGCGGATAGCGTGTCTTAGGAGCGAGCATAGCGGAGCAAGTCTATGACAGC AAGCTCTGGGCTGGTATTTCAATGAAGTGGAGCAATCGGTATTCTTCATGGCGGAAATCCCTTAGTGATCG CTGATGTGATCGGTTGAG	2072	VWVNEDRCKGCDICVSVCPAGVLGM GIEKERVLGKVAKVAYPESCIGCVQCE LHCPDFAIYVADRKDFKFAKVSKEAQE RSEKVKANKYMLLEETILEGRDK
HP0902	2073	GGTATAAAGCTTCTTACCACCAATCGGCTCATTTGCATATCGGCAAGCGGTATCAATCTGTCCAATCAAGCG AGCGGGCGCACCTTTTAGTGAAATCTAACCGGGAATATCACCGTTGATGGGCTTTAAGAGTGAATCAATCAAGT GGTGGTTATGCTTTGGCAGGATCAAGCGGAATTTAGTTAAGGTGGTAGCGATACCAAAACGGCACAGCC ACTTTAATAACGATATTAGTTGGGAAGATTGTGAATTTAAAGTGGATGCTACAGCTAATTTTAAAGGTATTG ATACTGGTAATGGTGTTCACACCTTAGATTTAGTGGCTTACAGGTAAAGTCAATCAACAAGCTCATTAACGG CTTCCACTAATGTGGCGTTAAACCTTCAACATTAATGAATGGTTGAAGACCAATGGGTGAGTGTGGGGAA TACACTCATTTAGCGAAGATATAGGAGTCAATCGGCATCAATACCGTGGTTTGAAGTGGCACTAGGTCAAT CTTTCTGGGGTGTCAATTTAAAGCGGTGAAGTGTGTTATAGATGAGTTTACTATAGCCCTTGGAAATTTT GACGCTAGGAATATTAAATGTTGAAATCACAGAAATTCGCTTCAACCCAGAAACCTTGGGGCACATCA AAGCTTATGTTTAAATCTAACCTGGTCAAAATCGGTCATGAGTCAATTTCAAAATTAACCATTCAGG GGGATTCATCAACAATCAGGCACTATCAATTTGTCGAGCGGCAAGTAGCCACCTTGAATGTAGGCAAT GCGGAGCTATGTTCTTAGTAATATGTGATAGCGGACTGGTTTACCAACCGCTCATGAAGATTAAACAGCGC TGAAGATCTCATTAAATAAAGAACATGTCTTATTGAAGCGAAATCATCGGTATGGCAATGTTCTTTAGGCAC AACAGCATTAGTAA	2074	YKASLTNAAHLHIGKGINLSNQASG RTLLVENLTGNITVDGLRVNNQVGGY ALAGSSANFEKAGTDKNGTATFNN DISLGRFVNLKVDAHTANFKGIDTGNG GFNTLDFSGVTGKVNINKLITASTNVAV KNFNINELVKTNGSVSVEYTHFSEDI GSQSRINTVRLETGTRSFSGGVKFS GEKLVIDEYFSPWNYFDARNIKNVEIT RKFASTPENPWGTSKLMFNLTGQ NAVMDYSQFSLTIQGDFFINNQTINY LVRGGQVATLNVGNAAMFFSNNVDS ATGFYQPLMKINSAQDLKNKEHVLLKA KIIGYGNVSLGTNSISNVNLIQFKERLA LYNNNNRMDICVVRNTDDIKACGTAIG NQSMVNNPDNYKYLIKAWKNIGISK ANGSKISV
HP0902	2075	AGGTGTTCAAAGACAGCAAAAAGACGCTTGGGGTTCTATCTATGAGATCAGCGAGTTCTATGAAGCCTATACCGCA TTGCTAAAAAACAAGACCGATACGCTATTTATGAGGTATCTCCCTCTAGTATTGGCCAGCATTTAAACGACT GCCCTTATGTCAATACCTGATTTGACGCTTTGAAAAGCTTTGGTGTCTTATTAATACCAAACTTGGATTGCA GAGGCACGATCAGCGCATCAAGCAAAACAGTATCAACATTATCAAAACGTTAAAGCAATAAGAGCGTTGAAACC ATCAAAGAGCTTATGATAGCATCGACTCTTATAACACCTTGTATCAATACCTTATACCTATGGGATAGCTCTT CTGTTTATCATAGCAATGGTGGTCTGCTTATAGCCCTAGCTAATTTATGCGAGATGAAGAGAAACCCCAT TTATCGCTATGGATGCCGAAACCCAGTGAGCATATTTGCCACAAACGCCAAAGAGCGAGTCAATGGAACGC GGATTTTGACAAAGAAAAAGAGAGAAATGGTAATAATATCGGAAATTAACCTTTTAAAGCGTAAAGAAACGC GCATGCTTTAAACGGGATTTGATGAAAAAGAAAAATTTATGGAGGCAAGACACGCAAGTGAATGATGCTGTTA TGACATCACTAAAGAAATGTATAGCAATTAGGAAGTGGAAATGAGAAATGCTC	2076	VFKDSKKDACGFIYEISEFMKAYTALLK KQDRYVYLLRYLPSRYWASILTALYV KYPDFDALKLLVSYYYQTWAGGTTR IKQTSINIKNVSKSVETIKELILNSIDS YNTFDQYLYNLWDSSVYHSHKWVRPV LALANYFMADEEKPHFIAMDAETQVEH ILPQTPKRGSQWNADFDKEKREEWVN NIALNTLLKRKNNAHALNGDFEKRKIY GGKDTSKVISCYDITKELYSNYRKWNE KSL
HP0016	2077	CGAGCGTGAAGAAATTTGCGTGAATTTCCGTTAAGAAAAATTTTATGCTGAACGCTAAGTCTTATTGATTCTGT TTTTGCGCCTTTATCTGCTCCCTTGATTTGATTGTTGAGCGCTTTTATTGATTAGGGTTTTAGCGCTCTTTA CGGTGCTGGAATTTTATGATGAAGACATTCAGATATTATCGTGGCTAAAGCAAAATAAAGACTAAACCAATGTT ATAGAGCTAGAAATTTAGAAAAGCTTTTAAAGCGCTATCAAAACAAAGTTTCAAACTATTTTAGGGTTTTGCCCTA AAAGCTATTCTATGAGCGAAGAAACAACTTTTAGGCTTGTATGATGAGCAATTTCTGCTCACTAAACGAAACCTT AGTGGGCATCTCCGTTTAGAAGGGTTAGCTACACCCATTAAAGCACAGAGCAATTTGCAAGATCTTTTACCCGAGC GCCAGATGCGTTGGATTCTTTAGAAAAAGTCTGGGCGCTTGTGGTTAAAGCGGTAATTTGATCACCACAA AACATTCAATCTGATCTCAATACCTGCAAGCGGATTTTGAATCAATTTGAAAAACAAAGAGTGTATGAATCATGATT TTTTAGTTTAGAAAGCACTCACTCTTTCATGGCGTTTGGAGCATAA	2078	SVKNLREISVKEKFLWLNKSYLISVFA PFILLPWIDLLSAFLLYLGLFALFSVLEF FDEDIADINAVAKSIKTKTKCYRA

HP0016	2079	GCACATTGTTATGAAACAGGTTAAATCTCGCATGAAAGAAAGCCTTTCAATAGCGAGCAGTTGATCTATTAGAAG AGCTTTTAAACCACCAAGAAAGCATTAGAAACAGCTTTCTGGTTTTCGGTGAATGATTTGGACATGCAAGCGG TGTTCAAGCTGGAGAGGAAACCGCTTGAAATCGCTTAFAAACTCTTAGGCTTGATGAGTTTATCGCTTGTGTTTAG CGATCGTGTAAATCAGTGTCTGCCCTTACAAAAAC	2080	AHCYENRLNLA
HP0016	2081	CTTTAATTTTGATATGATGCGCCGAATTTGGGAGCATTGAGCAAGGGTTTCAGGCTTTCATTTTCATCATTTATCC CCAAAATTTGGATTTTAAATAATGATAGAGTTGTTGCCCTTACGCTCTTTCTTAGCAGTGTGGGACGATAGAAAG CTTATTGACGGCTAAACCTTAGATGTGATTTTAAAGACGGGTGAGCGATATAAATAAGAACTAAAGCGCAAGG CTTGGGGAATATCATCTCAGGGCTTTTGGGGGAATGACAGGGTGGCTTTAGTGGGCGAGTCTATCAATTAACGCA AAATCCGGGGCTAAACAAAGGCTTCTACTTTTTTGGCCGGCTTTCTTAATGGTGCTCATATTAGTGTGTTAATGAAT ATGTGGTTAAGATCCCCATTGTG	2082	LIFDMHAPNLGSIEQGVSGFHFJIPKNL DFKIMIELLPYALSALVGTIESLLTAKTL DVILKDVSDKNKETKACIGLGNISGLL GGMTGCALVGQSIINAKS;GAKTRLSTF FAGFSLMVLILVFNEYVWIKPIV
HP0016	2083	CGAAGTTTATGACAAATTTTCATGGCGGTTTAAAAATTTAGAATTACAACTAAAGACGCATGGGTTGTGGGGCGA TCCAAAAGAGAAATGAAGAACAACTTTGTTTGAAGAAATGAATTAAGCAATTAAGCAATTAAGAAACAAAGAAAT CTTAAAGCAGACAAACACAGAAATTTAAGAAATTAAGAAATTAAGAAATTAAGAAATTAAGAAATTAAGAAAT TTGCCATTGCCACTCAACACCACCATCAATGGAATTAAGAAATTTAGAGAGCGCTGTGATAGAAACAGAGAAATAA GAAACATCCCAAAATGAGCCAAATCCAAAGAAATAAGAAATTTTAAACCTTTTCTCCAGAAATAGGCTTTTGATA AAAGTATTGCCCTACAAATGCTTTTGAAGAAATGAGAGATGCAAGCGTTATCTATCATTTAGAGAAATAATTAGGCG ATTATATCTTTATGTAGCGGTTCCTTCTTGGCACAACGGCATTTGCTTATTATCTTACTGACTA	2084	EVLEQFHGGLKNELEQT;RRMGLWGD PKENEEQTLFLEEIENELKQLENKENLK ADNNTFEKEENQDTKENQPNDLFSLPL PTQTTINGKEFVEEPVIE;TEKKETSQN EPIQEKERIFKNFFSRIGRFDKSIAPTML FEEVRDASVIHLEKKLGDYIFYVACFF FGTTALLIILLT
HP0016	2085	CGCTTACATGGCGACAAGAACCTTACAAACTATAACGAACGACTGATCAGCTTTTGTGATCGGGTTATGAGCT GCTCGGCAAGGCTGCTTATGCTGCTTTGAGGCTCGTTTCCCTCTTCAAGTGTGGGTTGTGCTGTTTT GCATTTATATTTGGGGCGGTTGTGGCTTAGTGATGGCCAAATTAAGCTAAATTAAGCTGTTTAAAGGACAAACG GAATCTTTTATCATGGAATGCCCAATACCGCTTCCAGTGGAGATGGTCTATTTAGTATCTACACCAATCG CTTCTTACCTTAAAGGCTGGGACTTACATTTAGTGGAGCGATTTAATCTGGTTTATGCTCAATACCCCTAAAA GGGATCGCGCCATGAAAGCTTATAACAAAGAAAGCTTGTAGTGAATAAGGATACCACTCTTCAAGCGAAGC	2086	AYMATRTLQNYNERLITL;VIGFMSCSA RLPIYVLFVGSFFPSSSAGFVLFYILG AVVALVMAKLLKLSVFKGQTESFIMEM PKYRFPWSRMVYFSIYTKSLSYLKKAG TYILVGAILWFMMSQYPKSDAAMKAYK QESLLVNKDTLLSSE
HP0016	2087	CTGTGATCCATGATTTGAGCCTGATATAGAGGTGTTTATAAGATTGGTAGGCATACAGCCCCAGAAAGACGC TAAGATTGCTCAATCCTTTTATGAAAGAGGCTTATGCCCTTGGTGCTAAAGCTTGGTGAATTAAGTCAAGCAA ATTTCTTCAATCCTAACAAATTTGGCTGCAATTAAGAAATTAAGCTTTTCTTTTGTGATTAATACTAGGTAT AATTTAATCCACCTAACAGGAAAGCTATGAAAGTAAACAGGCTTGTCTAAGCTTTTGGCCCTAACAAACA CGATATTTCTATCTAAATAAGAAATGATTTTATGAGTTCTATCATCTACTATCTCAATAAATAAGGGTTTTTT TGACTAAATAATTCATGCTGCTGGATGTTGGGCTTAAATTTGCATGCTTTTAGGGTGTATCTCTTCTTCTCAC TAGCATGTCGGTTAAAAAATTTTAAAGCGCTTAT	2088	VHDFEPDIEVFYKDWLGIQPPERR
HP0016	2089	CTAAAGAAATTTGGAGCCTTTTCTCAAGATGAAGAAGCTTGGAAAGTGGCGGATCTTATTGATCGCTGTGGGC CTCTCTCAAGCCCCCTTAATTGGGTATTTGTGCTAGATGGAGTTTTAGAGGGGCTGGCATTTCTAAAGTCTCACTG TATATTACACCCCTAAGCTTATGGGGTTAAGGATCATGCCCATTTACTGCTTTTAAATTCATCATTTTAAGGTGAAT TTATTTTGTAGTGATCGCATCAGAAACTTTTGGCTCATCTATCTAATAAGTTTCTTAAAGGCTTTGGAAA AGGTGCGGGAAAGGCTTGATTATTGCTTGGAGCTAGCGGTGTTTGAACGGCTTTCTCGCACCACTTGCACG CCCACTTGGCCACATAGAGCGCTCTCTCTATCTTTTAGCGATCTTTCTGGCAATAATAGGCACCTGATTGTCC CTGACTTGGTTGGATTGACAATCACTCTTAATTTCTGCCCACTCTCCATCGCATACGCTTTTCCACCCCATCAAAAT CTAGCGGATCTCTTCAAGCTTGATGCTTTCATGCTCTTCTCTAGCTTTCTCTAGCCCGGAGCGCCCT GCTGAAAGCGCATCAGCCGCGCACGCTCGCGCACTCCAGCTCAAAATCTCTTCATGCCCATGGTGGGCATAAA TCGCATTGATCACAACCGGATCTCTTATGGGCTTGACACCTCAACCCCTAAATTCACATGATCTCTCCCAAGCT CTTGGGTGAGCGCTTACCAATATCATGCAAAATACCGGCTCTCTAGCGAGTTTATCCCCCAAGCTGCTCTG CAATCAAGCGCGCTAAAGAGCGGACTTCTTTAGAAATGCTGTAGGGCTTTTGGCCAAACTGGAGCGGATAACGCATT TTGCCCTATTAAATTTTAAAGCTCATCTTCCATAGCTC	2090	KEFASLSQDEEVLEVARSYLIAVGLS QAPLIGYFVLDGVFRGAGISKVSLYINT LSLWGLRIMPIYLLJIHFKVEFIFVVIAS ETFLRSFIYKYKFSKGWIKRCGKKA

HP0016	2091	TTTAGAGGTGCTTACCCAAAGCTAAAGCATCGCTTTGATAAAACGGCCTTTGACTAAAGCGGCTTTTAAAGTAAC GGATATTGTCGCCGCAAAATGGCATTCTAAGAAGAGTTTTCGATTACGCTTCTGTTCCGAGCTCTTATCCACGCA CCCTATCGCTTTATCCATTCAAAAGCATGCGAAGAAATGTTAAAGGACGATAAGCACCACATGACATTAATAAATTA CGAAGAAAGTGAAGCGGATGGGGTTAAAGCGCAATGCCATACGATTAAATCATCGCAGGGAATGAATAATGCTC GATCAATTCCATATCGGCACAGCCCTTCCAAAGAAACGGCAGCATCGTGCTTCAATCAAACTTATGT GGCTATATCGTCAATTAGCGGATGAGATTAAAGATGACGCCATAGAGTGCTTAAGGATTAAAGTGCAAGGGATAG AAAATTTTGCAATTTGAGCGGGACAGAAAGAGCGGCTGTTAAACCTTTAAAGAACGCTATAAGCTCGGCGGATTTTGTGA GCGAGCTTGTGCTGAAGAAACAGAGCGGTGTTAAACCTTTAAAGAACGCTATAAGCTCGGCGGATTTTGTGA GGCGATGGCATCAATGACGCTCGGACTCTAGCGAGTGCTGATGCGGATTTAGGAAAGTTTAGCGATCGCTAAATAA GCAAGCAAGCGCAGACATTTGATCACCAATGACTCTTAAATTCGTTAGTGAAGTTTAGCGATCGCTAAATAA CTAAAGCATTTATTTGCAAAATATCTTGTTCGCTTAAAGGATTAAAGCGGTTTATCGTGCTAGGCTTATGGGG TAGCGAGCTTGTGGAAAGCGGCTTTGGCGATGTGGGGTTACGCTTTAGCCTTAGCCATTCATCGCGCGAT GAGAGCTTAAAGCCTTGATCGTATCATTAGCCATTAGAAAGGGGGGCAAAATGCATAAAATAGAGCGCTTACTCCA AACTCTAGCGCCTAAGGGG	2092	LEVLQAKSIAFDKGTGTLTKGVFKVTDI VPQNGHSKEEVLHYASCQQLSTHPIA LSIQKACEEMLKDDKHQHDIKNYEEVS GMGVKAQCHTDLIAAGNEKMLDQFHIA HSPSKENGTVHAFNQTYVGYVISDE IKDDAIECLRDCLKVQGIENFCILSGDRK SATESIAQTLGCEYHASLLPEEKTSVFK TFKERYKAPAFVGDGINDAPTASADV GIGMGKSELSKQSAADIVITNDSLNSLV KVLAIKKTKSIIWQNILFALGIKAVFIVL GLMGVASLWEAVFGDVGVTLLALANS MRAMRA
HP0016	2093	TTTAGAGACATTGGCAAAATCACCGTTTCCACTAATTTAGGCGATTGACATTAAAGGATTTGCGAAAGTCATCAG CCAGTCTCGCACCGCTTTGGGTTTGTACTAAAGATGGCGGAGACACAGAGGCTTGGTGCTTCTTTAA AAGCGCTAACACCAAGAAATCATCACTCAAGTGATCAAAACTAGAGAAATTAACCCCTTTTACCGAATGGCG TGTCATTAATGTTTTATGATCGCTCAGAAATACGCAAAAGCCATTGCCACCGTTCTAAACCCCTCATTTGAAGC CGTTGTTTTAATCATCATCACGCTCTTTTATTTAGGAAATTTAGGCGGAGCGTGCTGGGGTGATTTTACC TTTAAGCTTGCCGTGGCTTATTTTATCAAGTTTACGATCTGACTTAAATTTGATGATTTAGGGGATTTGGT ATCGCTATAGGCATGCTCATGACTCAGCCGTGGTGGAACGCTTTGAAAAATTAAGCGCTAAGCACTAA AACCACCTAACTCCATGCAATCTATCGTCTGTAAGAAATCGCTTTAGTGAGCGGGTGCTGATCATCA TTGTGTTTTTGTGCGGATTTAACTTACAGGGTTAGAGGTAAGATGTTTAGGCCCTTTAGCGCAAGCATTTGT ATCGGCTTTTAGGCACCTTAGTCTATCTATTACATCATCTGATGATGCTCTTGTCTTAAAGCCACGCCCA TAGCGAAACCTTTTAAACGAG	2094	LEDIGKITVSTNLGHLHIKDFAKVISQSR TRLGFVTKDVGGETTEGLVLSLKDANT KEITQVYQKLEELKPFPLPNGVSNVFI DRSEFTQKAIATVSKTLIEAVLIITLFLF LGNLRASVAVGVILPLSLSAFIFIKFSD LTNLMSLGLVIAIGMLIDSAAVAVVEN AFEKLSANTKTKLHAYRSCKEIAVS VSGVVIIVFFVPILTQGLEGKMFRLA QSIVYALLGTLVLSITIPVSVSSLVKATP HSETFLT
HP0016	2095	CGGCGATGTTTTCTACCGCTAATTCAGGGCTTTATGGAGCGGCGCATGATTTATGGGCTGTCCAAACAAAGATG TTTTTAAAGGTTTTTCCCAACTCAAGCAGCAAGGACGCCACTTATGCGATGTTTTTCCCTTCTTTTCTCTCAT AGGCTTTTAGTCCAAATTTATGCCAAAGAAATGTCTGGAAGCTTTGATTATGTGATCAGTTTACCGTGATTAT TGTGTGGGTAGCGTGCTGTTTCCGCAATATCTTTCCGCAAGCAATACTTAAAGCGGCGCATTTTATAGAGGATTT GCCTTATAAAGCCCCCTTTCTACCCCTTTTGAACCTCATAGGGATGCTGCTGCGCATCGGCTGATTGGTTCCG CTATGGATAAGGATCAACGCGATTGGGATGATTTAA	2096	AMFSTANSGLYGASRMVYGLSKQKMF FKVFSQNLNRQGTPTYAMFFSLFSLIG LLVQIYAKENVEALINVISFTVIIVWVS SVSQYSFRKQYLKAGHSLEDLPYKAPF LPFLQLIGITGCAIGVIGSAMDKDQRIG MIL
HP0016	2097	GGTGGCTCAAAATAGAAATGGTTTATGGGCGTTTCTAGCGGTTAGTCTTCTACTTTTCCCTCATAAATC AGAAATTGATCCACAGCTCAATGATGGGTTTTGGGTTTTTGTGCCCTTTGTTTTTCATCCATGAGGCTCTACTTTA GACTTAAATTAGTGTTTTAAACCCGCTTTGATTCTCCAAGGATATTGATTGTCTAGCGATGTTGAGTTTGCAC TGATCATTCAACCTTATTGTGGCGCAATACTTTAAAGAGGCTAAGCATTTTATTTCACTTCTTGGGGCTTCTAT GCCTTTAACTTTTATGTAACCAAGCGCAGTAGGCTTAAAGCGCAAGCGATCTCAAAACACCTACTACGCATT GCTCATGGCGCTATTTTGAAGGGGTATTATTCAGATTGCGATCAAAATACTCAACAAAGGCTTGAATGAAAGC TTAAGCGTCTAAATATTAGCGTGGCTAAGCTGTTGCTTTGAACATTTATGAACGCTTCTTAAGCTATCAAGAA CGAGGTGCAAGTTTGCATTTCTTTAAGAAATTTTGGTGGCTAATCGCGATAGGGGCTTATCAGAGGTGGG CTGTTTGGCTGGCAATTGCAATCAGGGCGGCTGGGATTTTGAAGAGTGACAAATGAATGCTGTAGCTTCTC GAACCTTAAATCAAGGGCGGATCACCAATAGCCGTTTTAGCCCTATAATGGGGGCTGCTCCTCAAACTCCCG TTATAAGTGAAATTCATAAAAGCTCTCTACGGGCTCATCTAAATGGTGGCGATGCGACTTATTATAGCCTTCT CTAAAGCCTTAGAATACAAAGTCCCTCTCTCAACGAGAAACGCAACAAACGAGCTTTTTCACGGCGTTTT CGTTGATCGTGGCAGCGATTGGGTGTAATGATCTCATGCTCAATGCTTGTCTTGGCACAAATCGCTCAACCAT TTCAAAATCT	2098	VWLKIEMLGAFLAGLVSTFFPHKSE LIHKLNDVGFVPLFFIHHVGSSTLDLK LVFLNPHLILQGILNVIAMLSLHLITSTLL WRKYFKEAKHLFSFALGASMPLTFLVT TAAVGLKQAISQNTYYALLMAAIFEGV LFTIAIKLNKKA

HP0016	2099	CCGGGCTTGCCTCTAATAACAAATACTCTTAATTGGCTCCGCAAGAGCGAGATCCAACTGCTCAGCTTGAAGTG GTCAGCACITTAACCATCTAGCCCCCTTAATGGTGGTAGGATCGCTCTCTTAGTGGAATCAATCATACCAAAGC GGTGGGTTTTAGACTGGCTTGTAAAGCAGCCTCTAGCGTTTGTGTTTTGATCGCAAGTTATGCCGAATTG AATCGAACCCCTTTGACTTGTAGAGCATGAAGCCGAGATCGTGGCGGTATTCACCGAATACAGCGGCTTGA AATGGGCGCATGTTCTTTTAGCGGAATACGCGCATTTATTCGCTTTTCTTTGATTTCTATTGTTTTTGGCGG GTTAACGCGATGGGCTTTATCCCTGGAGGCATAGCGATTTGATTAAGCGGGCTTTTGTCTTTTATCCATGTG GGTAGAGCGACTTATCCGCTATCGGCGCCAGACCACTGATGATATGTGCTGGAAATCATGCTGCTTATAGCGT TATTGAACATTGTGCTAACGGGCATTATCATTTAATTAAGGAGGTTTATGGCCAAACAAGATACAAAGCACTTC CTAAAGAGCCGGAAGTCCATAGTGGAGCCGAGCGATTAAAGACACCGTTAAACGAGCTTGGGTTGGATCTATTG AAAGGGTAGGGCTTACGATCAAGGAATTTTAGCCCAAGCGTAACCATCCATTACCT	2100	GLASNNKYSIGSARATIQLLSFEVST LTILAPLMVVGSLSLVEINHYQSGGFLD WLVFKQPLAFVLFLIASYAEINRTPFDL LEHEAEVAGYCTEYSGLKWGMFFLAE YAHLEAFSIVISIVFFGGFNWGFIPGG IAILKAGFFVFLSMWVRATYPHVRPDQ LMDMCWKIMPLALLNVLTCIIL
HP0016	2101	CCACTCAACACCCCAAGAGATTTGCTAAGCACGATTTCTTTGAGCATGCCAGGATTGAAATTGATCTTTAG GGCGCATCAACAGGTTTATCTCAAGGATAAAAGTATCTAACCCCTAAACAAAGGGCTTTTAGAGCATGTGGGC CATCTTTTAGCTCCAAAGAAACGCGCAACCCCTCTAAAGAGCTCCCTTTTAGCAGCCGATAAACTCAAGCC TTTAGAAGTGGCTTTTAGACCTACGCTCAATAACAAAGCGTTCAACAGCCCTTATAGCGCTTCAAAAACCACTCT TGGGCTAACGAACAGCTTGTTTAACCCCAAGATTTAGGCACTCTTAGCATCAATAAACCCCTGACTTCTATGATGA TTTGCAATTATGATTTAAATCGCATTCATTCGCAATACCTTATCCCTAGCTATGTGATCAACCAATGGTTACAGG CCGGTGGCTGATTTGGACAGCTACACCTTTTCAGGCGTCTTTAGAAATAGCGACAAATAAATTGAAAAATTGAA GATAAGACGCTAAAGAAATCAACGCTTTCTAACACCCCTTTTATCCAGCGTGATAGGATTACCAACCTTG CTTTCACTAAGATCCTCAAGGTTTGAAGCCTTAATTGATTGAGAAATCGGCATAAAACCCCTTAGGGTTCAATT CCCTTAAATGAAGCGAATTTGCATGGCTATATTGGCCCTAAGGATTACCGCTCTTTGAAAGCGATTACCCCATG TCACCGATGTAGATAGCTATGCTTAATCACCTTTCTTGCAAAAGCGGTGTTGTTTACTGATTATTGTATCAATT CGTGGGCAATTGGGTTGGGCTATCATCTTTAACGATTATCGTGGCATCATCTTTATCTCTTAAGCTATAAGGG CATGGTGAGCATGCAAAAGCTCAAGAAATTAGCCCTTAAATGAAAGAACTCCAAAGAAATAACAAGGGCGGAACCCC AAAAATTGCA	2102	TQTPQENLLSTISFEHARIEIDSLGRIK QVYLKDKKYLTPKQKGFLEHVGHLFSS KENAQPPKELPLLAADKLKFLVRF DPTLNKAFNTPYSASKTTLGPNEQLV LTQDLGTLSTLTFYDDDLHYDLKIAFK SPNNLIPSYVITNGYRPVADLDSYTFSG VLENSDKKIEKIEDKAKEIKRFSNTLF LSSVDRYFTLLFTKDPQGFALIDSEI GTKNPLGFISLKNANLHGIGPKDYR SLKAISPLMTDVIEWGLITFFAKGVFVLL DYLQFVGNWGWAIILLTIIVRIILYPLSY KGMVSMQKLKELAPKMKELCIEKYKGE PQKLQAHMMQLYKKGANPLGGCLPL ILQIPVFFAIYRVLYNAVELKSSEWILWI HDLSIMDPYFILPLLMGASMYWHQSVT PNTMTDPMQAKIFKLLPLFTIFLITFPA GLVLYWTTNNILSVLQQLINKVLENKK RMHAQNKKEH
HP0016	2103	ATTAGCTTTAGGCTGGGTGAGCCCGCTATCGCAAAATTGTTAGCCGCGCTGTTGAGCTATGGATTGAGAG AAATCCTATTTTATCCATTCAATGAGCGTGGTATAGCGTTTAAAGCATCACITTTTGAATGCTGCTGTTGGCGGA GATTGTGCTAAATCTTAGCGATCGCTAAATCTGAAAAGCCACCTTTTGGCCGAGCCCTTTGCGATGTGTTTTG GGTGGTTTTATCCGGTGGTGGTGTGTTGATGTGATCGCTCATTTTTTTGAAAAGATGGGCATCAATCCTAA AGAGCATGACGGCACGCTTCTGAAGAGAGTTAAATCATTTGCGCGAGAGTTGAGAGAGGGCATTATTGATT CAGTGGAGGGCGAAATCATTAAACGCGAGGATTCTTCTGACACGAGCGCTAAAGAAATCATGACCCACGAAA GACATGGTGTGTTGGATGAAGAAACAGCTATGAGAAATATAGACATTGTTTAAAGGCCATTTCACGGCTAC CCTATTGCAAGGTTCTAAGGATAACATTATCGCATGGTGATATTAGGATTGCTTTGCGGCTCTATTTTACC CCCAATGATGATTCAATCAATCGTTAGGAAATGATCATGTCGCCGAAAGCGCTTCCATTCTCAATCCTT ATTAAATGAAAAGAGCAATCCATACCGCTTTGTTGATGATGATGATGATGATGATGATGATGATGATGATGAT GGAAGACATCATTGAAGAGATCATGGCGGAGATTAGCGACGAATACGACTTAAACAAGAGGGCATAACAAGCTTG AAGAGGGCGTGTGTTGAATTAGAGGGCATGCTGGATTAGAGAGCGTAGAAGAGCGCTTCACATTGAATTGATAAA GAATGCGAGCAGGTAACGCTTGGGGC	2104	LALGWVGEPAIAKLLAALFESMDLREN PIFIHSMVSVIAFLSITFLHVVLGEIVPKS LAIKSEKATLFAARPLHVFVWVFYFVW RLFDVIAHFFLKKMGINPKEDGTHSE EELKIVGESLREGIIDSVEGEIKNAXDF SDTSAKEIMTPRKDMVCLDEE:ENSYEEN IDIVLKGHFTRYPYCKGSKDNIGMWHIR DLLSRIFTPKMHDFNQIVRKMIIVPES ASISQILIKMKKEQIHTALVIDEYGGTAG LLTMEDIEEIMGEISDEYDLKQEGINKL EEGVFELEGMLDLESVEEALHIEFDKE CEQVTLLG

HP1559	2105	GCTCCAAGCATCAATAAGATGGCGTGAGCGTGGCTAAAGAGATTGAATTAAGTTGCCCGGTAGCTAACATGGCGGCTCAAACTCGTTAAAGAAGTAGCGAGCAAAACCGCTGATGCTGCCGGGATGGCAGCACACGACCGTGGCTGGCTTATAGCATTTTAAAGAAGTTTGAAGAACATACGGCTGGGCTAACCTTATTGAAGTGAACGAGGCATGGATAAAGCCGCTGAAGCCATTATTAATGAGCTTAAAGAGCGAGCAAAAGTGGCGGTAAAGAGAAATCACCCAAAGTGGCGACCATTTCTGCAAACTCCGATCACAAATATCGGAACTCATCGCTGACGCTATGGAAAGTGGGTAAAGACGGCGTATCACCGTTGAAGAAGCTAAGGGCATTAAGATGATGTTGTAGAAGGCATGCAATTTGATAGAGGCTACCTCTCCCTTATTTGTAAACAAACGCTGAGAAATGACCGCTCAATTGGATAACGCTTACATCCTTTTAAACGGATAAAAAATCTCTAGCATGAAAGACATTTCTCCCGCTACTAGAAAAACCATGAAGAGGGCAACCGCTTTTAAATCATCGTGAAGACATTGAGGGCGAAGCTTTAACGACTCT	2106	APSTKDGVSVAKEIELSCPVANMGAQLVKEVASKTADAAGDGTATTATVLAYSIFKEGLRNITAGANPIEVKRGMDKAAEAILNELKKASKKVGGKEEITQVATISANSDHNIIGKLIADAMEKVGKDGVTVEEAKGIEDELVDWEGMQFDRGYLSPYFVTNAEKMTAQLDNAYILLTDKKISSMKDILPLLEKTMKEGKPLIIAEDIEGEALT
HP1559	2107	ACCGCCAGCTTTTATAGAAAGAGAGCGGATTTGATAGGATTTCCGCTTTAGAAGTGGGTAAAGACTTTCGCTGAACGGAGCGTGAAGTAGCGGAAGCCATTGACTTTTATAGATTTTACCTTACAGCTTAAGGTTGCAAGAGCAAAACACAAAAACGCAATTCACCCCTAAAGCGTGGCGTGGTCAATGCCCCATGGAAATTTCCCTGTGGCATTTCTGTAGGCACTATCGCTGCCCCCTAGCTACGGGCAATCGGGTATTTACAAGCCCTCAAGTTTGTCTAGCGTAAACGGGCTATAAGCTTTG	2108	TAQLFRERRGDLIGISALEVGKTFAEIDAEVSEADIFLEFYPSLRVLQEQTQFTPKGVGVIAPIWNPFPVGVISVGTIAA PLATGNRVYKPPSSLSVVTGYKL
HP1559	2109	AAATCCACCGGTTATGGCGAAGATCTAAACCCCAACGCAAAAGCTTTCAATGACGCACTCATTAAGAGCATGGATATTGAGCATACCTAGCGTTAAGATTAGGCTGTTGTAGCGGAGATAGCGATGAGGGCTGTGCTACTAACAAACCTTATTATCTTCTCAAAAAGGCTATCCTTTTATAGGTATCAAAATTCGCTGATTTTCAAGGCACCGCGGTTTTAATCACGCAATTTAATCTAGATAAACTTATGCCACATTCAAAGCAATTTGTTATGGCTGGATCAAGTTAGCGATTTAGTCTACATGCACGATAAAGACATAGAGCTTTTAAACCCATCTTAAAGATTATGCTATGCTATAAAGATAAATCCCTCTTTATACAGACTATGGGATTTTACACCAACGCCAGAGTGGCGAATTTGCTGCTCTCATCCCCAAAGTCAAAAAACCTCAAAAACCCCAAAAAGGAATGAAGCCTATGGTTTTT	2110	KSTGYGEDLPNAKAFNDALIKSMIDIEHYPVKIRAVVARDSDVRAVPTNPKPYLSQKGYPFDRYQNSLIFQGTPLTHFNLDKTYAHIQSSFYGWIKVSDLYVMHDKDIELLTHLKDYMPIKDKIPLYTDYGD FYTNARVGEFALIPQSQKTPQKPQK ELKAYGF
HP1559	2111	AGCCAAAGTCTATCCAGCAAGATAAAACGCCCAAGCCCATGAAGCGATCAGGCCCATCTCTATTATTTAGAGCCAAACGCTTTAAAGACTACCTTAAGCCTGAAGATTAAGGCTCTATACCTTAATTTACAAACGCTTTTAGCTCTCAAAATGCAAGACGCTCTTTTGAAGCCCAAGCGTGGTTGTGGCTTGGAAAAAGCGAGTTTAAAGCGAGTGGAGAAAGCTCTTTTGTATGGCTATTATAAAATTTAGGCAATGACGATAAGGACAAATGCTCCCCAATTTGAAAGAAATGACCCCATTAATAGAA	2112	AKVYSSKNKNAQEAHEAIRPTSILEPNALKDYLKPEELRLYTLIKRFLASQMQDALFESQSVVACEKGEFKASGRKLLFD GYKILGNDDKDKLLPNLKENDPIKLE
HP1559	2113	GAGCAACGCCCATGTTACAGAACCTCCAGCACGCTATTCTGAAGCGAGC	2114	SNAHVTEPPARYSEAS
HP1559	2115	AGGCAGGCCAGCACCTACGCCCAACGATTTCCCTTTTACAAACAGAGACTACATCAAGGTAGAAAAAAGCAAAATCAGTGTCTTAGAGAGCGCTTTAAGGTGATAGAAATTTAGAAAGCATTTTAGAAGAAATCGTGGATTCCAAATTCAGCGCTTCTTAGAAGAGAAATTTGACAAATATGCTCAAAATAAGCCGACTACGCAAGTCTTAAAGGACTTTTACTACCCCTTTATGGATAAAATTTGAAGCTGGGAAAGAAATATCATCTCAAAAGTGCATGAAAAACCGGTCAATCATGCCCTAAATGGGTGGGAATTAGTCAAAAAAATAGCCGTTATGGGAGTTTATCGCTTGCAACAATACCCCTAAATGCAAAATATGCAAAACAACTGAAAGCGCTAATGATGAAGCGCATCAAGAAATGTGCGAAAAATGCGGAGGGGAATGGTGCAAAAAATTCAGCAGAAACGGGGCGTTTTTAGCTTGCAACAATTACCCTGAATGCAAAAAACCAACCAATCGTTAAATAACACCCCTAACGCCAAAGAA	2116	GRPSTYAPTISLLQNRDYIKVEKKQISALESAFKVIEILEKHFEIIVDSKFSASLEEELONIAQNKADYQQVLKDFYYPFMDKIEAGKNIISQKVHEKTGQSCPKCGGELVKKNSRYGEFIACNNYPKCKYVKQTESANDEADQELCEKCGGEMVQKFSRNG AFLACNNYPECKNTKSLKNTPNNAKE

HP1559	2117	ATTGCGTGCAAGAAAGCGAAAGAAATTAGACGATAAAGTCCAAAGCTGAAAGAAAGAAATCAAAATC AATTGGTGGAAATATTCAGGATTAAACAATAGCGCAAGTTTATTATTAGCCGCTTAGCGCTGGTGATGATAAA CAGATAGAACTAGAACAAAGAAAGAAAGCTGAAACCTAGGATAGAGCGAACAAGAGTGGGATAGAACTAG AACAGAAAGACAGAAACAAAGAGTGGGATAGAACTCGCTAATAGTCAATAAAGCAGAACAGAAAGACAA AAGACAGAACAAAGAAACAAAGCAATAAGAGTGGGATAGAGTCCGATAGAGTGAACAGCAAAACAAAGACCATTAATACA CAAGAGATTGATTAAAGAACAGAAAGATTTCATTAAAGAAACAGAAACAAATGCCAAGAAATCATATCAATTCT TTATTAATAAATTAGGAATTAGGGTGGCATTGCTATAGAAGTAGAAGCTGAATGCAAAACCCCTAAACCTGCAAAA CCAATCAAAACCCCTATCCAGCCAAACACCTCCCAACTCTAAACACCTCATTCTCAAGAGGATCAAAAGCGCAA GAGTTATCGCTTATTGCAAAAGAGCTAGAAATTTCTGCCCTATTGCAAAAGCTATCGCTAAACAAAGTGAATTTCT ATAACCAAGTTCTATCGCTTATTAGAACTAGATCCTAGAGATTTAAGGTTACAGAAAGTGGCAAAAGAAATCT AAAAATACGCTCTAAAGCTCAAGCTAAATGCTTGAATGAGGATTTAAACCCAGACCCCAAGCCACCTTCCAAAC CTCTCAAGCCCTTTGTTGCTGCTCAAAATATTTGCTGATGTTAATAAGAAATAGAACGAGTTGCTAATACTGAAAG AAAGCAGAAAGCGGGTTATGTTATAGTAAAGGATGTAGGCATAAGAAATAAGAACACCATATAAAATCGTTTTTA GCTTCTAGGA	2118	IACKKAKELDDKVQDKSKQAEKENQIN WWKYSGLTIAASLLA/CSAGDQDKQI ELEQEKKEAENARDRANKSGIELEQER QKTNKSGIELANSQIKAEQERQKTEQE KQKANKSAIELEQKQKTINTQRDLIKE QKDFIKETEQCENHNQFFIKLGIK GGIAIEVEAECKTPKPAKTNQTPIQPKH LPNSKQPHSQRGSKAQEFIAYLQKELE FLPYSQKAIKQVNFYK/PSSIAYLELDP RDFKVTEEWQKENLKIRSKAQAKMLE MRDLKPDPAHLPTSQSLLFVQKIFAD VNKEIEAVANTEKAEKAGYGYSKRM
HP1559	2119	ATCGCTGAAATCGTGGTTGAGAGAAACGCCCTGAAAAACCCCTGATGCAACGATGGTTAAATTTATCATGC GATGCTTGAGTGTATGATAATGGGGCTAATCTAAAGAAAGGTATCTGCCCTGGTCTTTGAAAGTAAACACGATTGGC CCCAAGCATTAAACGCGCTAGAAACACCCACAAAGCGGGAAGACCCCTTAGCCCTGATTGATTACATTTCCG TTACGCTCGGCCATTGCTGAAGAAACGCTAGCGGAGGCAAGTGTAACCGCCCCCACTAATGGGGCGTGCG CGGTGGTGCCAAAGCGTGCTTTTATACGCTAAA	2120	IAEIVRLRENALKNHPDATMKIYHAML ECYDNGANSKERYLPGSLKVTRLAPSI KTRLEKHPTSGKDPALIDYISLYARAIA EENASGGKVVTAPTNGACAVVPSVLL YAK
HP1559	2121	CCAAAGAGGTGCTATCATTCATTCGCCCTTATTCGCCCTTCCAAAGCTGAGGTGGATCGATATGCGCGGTATA GTTTGAGTGGGAATACGCGTATGACAGGCCATTTTGTGGGTTCTAAAGGATTGGCCCTGATTGTCACAGGGTA GGGATTATCGCACACCGGATTGGCATGAAAGACACATGTTGATCCTAAAGCGTTGTGCCGACAGCATCATGCC CGCCTATAAGCATTATTACAAAAGAGCGATTGTGACACCGCTTATGCAGAACCTTGACGCAAAAAGGTTTT TGGCGTGCCCTATGACACAGAAACGGCGTGAAATTAGGGAGCGTAGAAGAGCGGAAAGCCCTATTAGAAAGAA GCTAAAAAATCACAGCCGATATGAAGACAAAGAGGTGCTAGAACGATTGAGAGAGTGAAGTGTAGAAATTGT GGCTTTGATCGCTTATTGAATAGCTTGGTAATCCAGGATCAACGCCAATCAAAACGCTAAATAAGGGTGAATG ATGGATTTAGAAAGTTGAGAGGTTTGGGTATGCGTTTATACCATCTTTTACGCTCTTTTGTATGCTATATTTT TAGCATGTATAGAAAGCAAAAAGGCAATTATGAGGATACGGATACGCTAGCGTTAAATGATGCTTTAGA AGACGAGTTGATTGAACCCAGCCCATAAAAGTTTCATGATAATGGCATAAAGGAAAGTTGAAATGGATTTTTTAAACG ACCATATAAATGTTTTGGCTTGATTGCGCGCTTGATTTAGTTTTAACCATCTATGAATCCAGTTCGCTCATTA AGAAATGCGCGACAGCAATCTCAAGGTGAGCTGTAGAAATGGGCATTGATTGATGGGATAGGGGAGTTTGCC AATAATGTGCCAGTAGGCTGATCGCAAGCTTTATGTGCACGATT	2122	QEGCYHCHSQLIRPFQAEVDRYGAYS LSGEYAYDRPFLWGSKRIGPDLHRVG DYRTTDWHEKHMFDPKSVVPHSIMPA YKHLFTKSDFDIYAEALTQKKVFGV PYDTENGVKLGSEEA(KKAYLEEAKKI TADMKDKRVLEAIERGEVLEIVALIAYL NSLGNRINANQNAK

HP1559	2123	CCATTTAGAGATTTACCGGTGATCAATAAAATTTGATTTGCCTAATGCGAATGTTTTAGAAAGTCAACACGAGATATAGAA GACACGATAGGATTTGATGCTCAACACTAATGAAGTGAGTCTAAAGCTAGGCTTGGCATTAAAGATTTGTTAGAA AAATCATTAACACCATCTGCCCTAGCGGTGATTTAACGCTCTTTAAAGCGCTCATTTATGATTCATGTTG ACAATTATTTAGGGCGCTAGCGTTGGTGCATGATGGAGCATCAACACCGAGCAAGAAATTTTAGTGATG GGGACGGGTAAACAAACATGGCGTTTAGGGCTATACCTAACCTTTGAAAAAATCCCGACCAAAAGTTTAGA ATCGCGGAGATTTGGCATTGTGAGTTTAGGGCTAAAGCGTTACGGATATTGCGGTGGTGATACGCTCACAGAC GCTAAACCCCTACCTCAACCCATTGAAGCCTTTATCGCGCTAACCCCTTTGTTTTCGCGGGCTTTACCCCTATA GAAAGCTCTGTGGCGTTGAGATTGAAGAGCGTTTAGGGTGGCTTTTAGGGTTATTGCACATGGAAGTGAATAAGAAAG ACTGGAAGGGAAATTTGGCCTTAACCTCATCGCTACCGCTCCACGGTGGTGATGAAGTGCATTTAACGGATAATA GCATCAAAATACGTCACAAACCCCTAGCGAATTCGCCCTGAAATGTATCGCTGCATCAAGAGCGCTTTGTGAGG GCGACGATCATCACGCGAGTGAATTTGGGTAAATTAATGCAGTTATTGAATAATAAGAGGCAATCAAGAAAA ATGGAATATTGAACCAATCTCGTGTGATGCTCACTTATTCCTTGGCGAGCAATGAAATTTGTGATGGATTTTATGACA AACTCAAAATCTTGC	2124	HLEILPVINKIDLNPANVLEVKQDIEDTI GDCSNTNEVSAKARLGIKDLLEKIITIP APSGDFNAPLKALYDSWFDNYLGALA LVRIMDGSINTEQEILVMGTGKKHGV GLYYPNPLKKIPTKSLCEGGEIGIVSLGL SVTDIAVGDTLTDKKNPTSKPIEGFMPA KPFVAGLYPIETDRFEDLREALKLQL NDCALNFEPESSVALGFGFRVGFLL HMEVIKERLEREFGLNLATAPTYYEV HLTDNSIKYVQNPSLPPENCIAKKEP FVRATITPSEFLGNLMQLLNKRGIQE KMEYLNQSRVMLTYSLPSNEIVMDFYD KLKSCCTKGYASFDEYEPENREANLVKL DVRVAGDVVDALSIIDKNKAYEKGAL VETMKELIPRQLFEVAIQASVGNKIIARE TIKSVGKNVTAKCYGGDITRKRKLEK QKEGKKRMKAIGKVLELPOEAFILKIKI ERKIFGNGNPTSMFDLNKIKYQWADHL WKTMLANTWFAEEVSMNDKRDYKL SAEEKIGYDRALAQILFMDSLQANLID NINPITSPENLCLVROAYEEALHSHA YAVMVESISANTEEIYDMWRNDMLK SKNDYIAQVYMEIAKNPTTEENILKALFA NOILEGIYFSGFSYF	2126	2128	AFIESASIEKMASKSPPPPLKIAVANWV GDEEIKFKKSVLYFILSQRYAITLHQ PNEFSDLVFSNPLGAARKILSYQNTKR VFYTGGENESPENLFDYAIQFDELDN DRYLRMPLYAHLYHYKAELVNDTTAPY KLKDNSLYA	2130	ERILELVNLGKIKSKISSNKLIDASSGT NALIKKVENSLISMDMNGRSLEPVFE KTINTILNLHDKVIGAKDETISAFKNEIM FLKDALISMQEVYEDKKTIDLLRDELN QAREEIEFMKRYRLMWGVADMSV NKK
HP1559	2125	GAAAGAAAGATTTTGGGGCAATCCTACAAGCATGTTTGATTTGAATAAGATCAAGTATCAATGGCGGATCATTTG TGGAAAACGATGCTCGCTAACACCTGGTTGCTGAAGAGTGAGCATGAATGATGACAAAAGGGATTATTGAAAT AAGCGCAGAGGAAAGATCGGTTATGACAGAGCTTTAGCGCAACTCATTTTATGGACAGCTTGCAAGCGAATAAT TAATTGACAATATCAATCCCTCATCACCGCCCGAAATCAATTTGTTGGTGGCTCAAGCTTATGAAGAAGCC TACACAGCCATCGGTATCGGTGATGGTGAAGAGCATAAGTGCGAATCTGAAGAGATTTATGACATGTGGCGTAAC GATATGCAATTAAGAGCAAGACGACTATATCGCGAAGTGATATGGAATTAGCCAAAACCCACAGAGAAAA CATTTCTAAAGCGCTTTTGTCTAACCCAGATTTAGAGGGGATTTATTTATAGCGGGTTAGCTATTTTA	2127	CGCCTTTATAGAAAGCGCTTCCATTGAAAAATGGCCTCTAAATCTCCCCCCCCCTAAATAATCGCTGTGGCGA ATTGGTGGGAGATGAAGAAATTAAGAAATTAAGAGAGCGTCTTTATTTATCTAAGCCAACGCTACGCAATCA CCCTCCACCAAAACCCCAATGAATTTAGATCTAGTTTGTAGCAATCCCTTGAGCGGCTAGAAAGATTTATCTTA TCAAAACACTAAACGAGTGTTTACACCGGTGAACCAACGATCACTAATTTCAACCTCTTGATTACGCCATAGGCT TGATGAATTTGATTTAATGATCGTTATTTGAGAAATGCTTTGTATTATGCCCATTTGCACTATAAAGCCGAGCTTGT AATGACACCACTGCGCCTACAAACTCAAGACACAGCCTTTATGCT	2129	AAGAAAGGATTTTGGAAATTAGTGAATCTTGTAATAATCAAGAGCAAAATAAGCAGCAACAGCTTTTAATTGATGCGA GCAGCGGGACAAACGCTTTAATCAAAAGGTAGAAATAGTTTGATTTCTATGGATATGAACGGCGCTCTTTAGAAC CTGTGTTTGTGAAAGACCATTAACACGATTTTAAACCTTGATGATAAGTGCTATTGGCGCTAAAGATGAACGATTT CAGCCTTTAAATAATGAAACATGTTTAAAGAGACGCTTTAATCTCTATGCAAGAGTCTATGAAGAAGATAAAAAAC CATTGATCTTTTGGCGATGAACCTCAATCAAGCGAGAGAGAAATGAATTTAATTAACGCCCATGCTGAGGCTTATGCGG GGGAAAGTGGCTGACATGAGCAGCGTGAATAAAAGTAGTTTAAATTAACGCCCATGCTGAGGCTTATGCGG TAATTTAGGTGAATCTATGTAGAAATTTGGGTGTTTAAACAGAAATGCAAGCTTGAAGGAGATCATGTCCATTTCAC GCAGAAGTATCTAAGAAAAATCCCAATCGCGCTCGCTAGCGCTAATGTTTGAAGCTGTTGTTTGAAGAAAG TAGAATCCATTCCGCATGCAACGCTTTTGGCCCCCTTATCGCAAGGTTCAAAATGGAGTGAATAAGATATTGTCC CCCAAAAGCGATTATAACCTACTATGATTTAAAGCGATGTTGATAGGGTGTATTAGATAGTAGGTTGAAAGT ATCCTTGGCGGAGAGCTTCTTAGAAACAAAAAACCAAGAAATTCGCGGGAGAGAGTTGTGCGGT GTGAGTTGGGATGTGGCTTGGATTTAGCGGCTAAAAAGCTTAAGAAATCCCTAAAGAAAAACATTTAATGCGCAGT TATGGTGGCTGGGGCATGCGGCGAGCTTGATCGTTGCCATCATTTAGCATGGCGTTTTTTTAAACACGACTTAGG AGGGGCTATTG			
HP1559	2127	CGCCTTTATAGAAAGCGCTTCCATTGAAAAATGGCCTCTAAATCTCCCCCCCCCTAAATAATCGCTGTGGCGA ATTGGTGGGAGATGAAGAAATTAAGAAATTAAGAGAGCGTCTTTATTTATCTAAGCCAACGCTACGCAATCA CCCTCCACCAAAACCCCAATGAATTTAGATCTAGTTTGTAGCAATCCCTTGAGCGGCTAGAAAGATTTATCTTA TCAAAACACTAAACGAGTGTTTACACCGGTGAACCAACGATCACTAATTTCAACCTCTTGATTACGCCATAGGCT TGATGAATTTGATTTAATGATCGTTATTTGAGAAATGCTTTGTATTATGCCCATTTGCACTATAAAGCCGAGCTTGT AATGACACCACTGCGCCTACAAACTCAAGACACAGCCTTTATGCT	2129	AAGAAAGGATTTTGGAAATTAGTGAATCTTGTAATAATCAAGAGCAAAATAAGCAGCAACAGCTTTTAATTGATGCGA GCAGCGGGACAAACGCTTTAATCAAAAGGTAGAAATAGTTTGATTTCTATGGATATGAACGGCGCTCTTTAGAAC CTGTGTTTGTGAAAGACCATTAACACGATTTTAAACCTTGATGATAAGTGCTATTGGCGCTAAAGATGAACGATTT CAGCCTTTAAATAATGAAACATGTTTAAAGAGACGCTTTAATCTCTATGCAAGAGTCTATGAAGAAGATAAAAAAC CATTGATCTTTTGGCGATGAACCTCAATCAAGCGAGAGAGAAATGAATTTAATTAACGCCCATGCTGAGGCTTATGCGG GGGAAAGTGGCTGACATGAGCAGCGTGAATAAAAGTAGTTTAAATTAACGCCCATGCTGAGGCTTATGCGG TAATTTAGGTGAATCTATGTAGAAATTTGGGTGTTTAAACAGAAATGCAAGCTTGAAGGAGATCATGTCCATTTCAC GCAGAAGTATCTAAGAAAAATCCCAATCGCGCTCGCTAGCGCTAATGTTTGAAGCTGTTGTTTGAAGAAAG TAGAATCCATTCCGCATGCAACGCTTTTGGCCCCCTTATCGCAAGGTTCAAAATGGAGTGAATAAGATATTGTCC CCCAAAAGCGATTATAACCTACTATGATTTAAAGCGATGTTGATAGGGTGTATTAGATAGTAGGTTGAAAGT ATCCTTGGCGGAGAGCTTCTTAGAAACAAAAAACCAAGAAATTCGCGGGAGAGAGTTGTGCGGT GTGAGTTGGGATGTGGCTTGGATTTAGCGGCTAAAAAGCTTAAGAAATCCCTAAAGAAAAACATTTAATGCGCAGT TATGGTGGCTGGGGCATGCGGCGAGCTTGATCGTTGCCATCATTTAGCATGGCGTTTTTTTAAACACGACTTAGG AGGGGCTATTG					
HP1559	2129	AAGAAAGGATTTTGGAAATTAGTGAATCTTGTAATAATCAAGAGCAAAATAAGCAGCAACAGCTTTTAATTGATGCGA GCAGCGGGACAAACGCTTTAATCAAAAGGTAGAAATAGTTTGATTTCTATGGATATGAACGGCGCTCTTTAGAAC CTGTGTTTGTGAAAGACCATTAACACGATTTTAAACCTTGATGATAAGTGCTATTGGCGCTAAAGATGAACGATTT CAGCCTTTAAATAATGAAACATGTTTAAAGAGACGCTTTAATCTCTATGCAAGAGTCTATGAAGAAGATAAAAAAC CATTGATCTTTTGGCGATGAACCTCAATCAAGCGAGAGAGAAATGAATTTAATTAACGCCCATGCTGAGGCTTATGCGG GGGAAAGTGGCTGACATGAGCAGCGTGAATAAAAGTAGTTTAAATTAACGCCCATGCTGAGGCTTATGCGG TAATTTAGGTGAATCTATGTAGAAATTTGGGTGTTTAAACAGAAATGCAAGCTTGAAGGAGATCATGTCCATTTCAC GCAGAAGTATCTAAGAAAAATCCCAATCGCGCTCGCTAGCGCTAATGTTTGAAGCTGTTGTTTGAAGAAAG TAGAATCCATTCCGCATGCAACGCTTTTGGCCCCCTTATCGCAAGGTTCAAAATGGAGTGAATAAGATATTGTCC CCCAAAAGCGATTATAACCTACTATGATTTAAAGCGATGTTGATAGGGTGTATTAGATAGTAGGTTGAAAGT ATCCTTGGCGGAGAGCTTCTTAGAAACAAAAAACCAAGAAATTCGCGGGAGAGAGTTGTGCGGT GTGAGTTGGGATGTGGCTTGGATTTAGCGGCTAAAAAGCTTAAGAAATCCCTAAAGAAAAACATTTAATGCGCAGT TATGGTGGCTGGGGCATGCGGCGAGCTTGATCGTTGCCATCATTTAGCATGGCGTTTTTTTAAACACGACTTAGG AGGGGCTATTG							

HP1559	2131	AGCCCCCTAGACAAATTCAGCAACCCAAACGGCGGTATATGCGTCTTTTAAATTTTAGACATTCAAAAAAGCCTTTGGATAACGCCCTTAAGAACGCTTTTATCCATGAATTAGAGCAGCCCTTAAACAGCGGAACAGCAAAATTTAGCCAAAGAGCTTCTCAATGAGCCTGTGGATAAAAAAGAAAAATTTGAATCCCTATGTCAGAAATCGCCGATCACACGCATGGGGAATACACCAACGCCCTGAAATTAGTGGAATTTCTTATGTTATAGCCTATGCTGATGGGATTTGGATAGCAAGAAAAAGAAATGTTTTAGATGTGGGGGTGTTTTGCAGATAGACA	2132	SPLDKFKQTQTGAYMRLLKFLDIQKNA LDNALRTLFIHELEQLNSEQQNLAKEL LNEPVDKKENFESLCQE:ADHTHGEYT KRLKLVFLMLLAYADGILDSKEKELFL DVGVFLLQID
HP1559	2133	CGAACGAGAGATTTACGATCTAGACTATGCGATCGTCAAGCGGAAAGATTTAAACCAAGCTTTACCACAGGGCGGA CGCAAAAGAGAACGGACATGAACGAGAGAGCAGATTAAAGCATTGCTGAAAATTTGATCCTAAAAAGATATTTGGTA GCGGAGGGTTGAAGATTTACCGATCATCTACATGACGGCAAGTATCGCAGGAACACAGAAATCCAAGGCAT GCTAACTTCACGCCCTAAAGCCGTTTTCTTACGAGAGCGATCAAGGAATCTATCACATAGACTTAAACCGGA CGAGTTGTTAGTGAGAGTGCCACACAGCGCTATAGCGGTTTTAAGCCACTATGAAGCCAAAGTTAAAGAAATAGACCAA GACGCTTCAATAGCGAAAGCGATCAGCTATAGCGGTTTTAAGCCACTATGAAGCCAAAGTTAAAGAAATAGACCAA AAATTAGACGCTGATAGCTACTCTATTAAACACATTTGTTGCTAAATTTGAATTTGATAAGGCTACGCATCCTA ATGTAACCGATAGTAATTTAGCGTTGCTGATGTTAACATGCCACCAACCAAGCAAGGATAGAAATTAAGCAACC GCTGGAATAAGAAATTTTCAACGACATTAAGCTATGAAGATTAAGCAAGTAAAGAAATGTTGTAGATAACCGGGCAGTT TTCACAATCTCATCCAGATCTGAACCTTCCCTAAGGTGAGTTAAACGCTTATTTAAGCGATATTATGATCGCAGTTT TGCGAATTTAAAGAAATTAACCAAGCAGGAGCGCTGAAAGATTTGAGCGAAAAATTTCTATAAACGAGTTTCGTT AGAGATGTTTGAAGAGCGGATCAAGCAGGCGGATATTAGCGAGATTTAGGAGGAGCGGATCGCAGGATTTGCA CGATTTGATGATCCGAGCAAGCGTTATTGAAGCCCTTAAGAGCGGATAACATTAAAAAGGCTTGAAGATTACAAG ATCGCAGATGTTACT	2134	EREIYDLDYAIVKAKDLKPSFTTGGTQK RTDMNEEQIKSIAENFDPKKIFGSGGF EDLPILHDGQVIAGNHRIOGMLNFTPK SRFSYERAIKEYYHIDLKPDPELLVRVPH KRLNNTENNLAASSNQGRFNSESDHA IAVLSHYEAKLKELDQKLDADSIYSLKNI VAKNLNFDKATHPNVTCNLALLMFNM PRTKTQGIENLRWKKKEFSNDIKSYEK VKMFVDNAGSFHNLHDLNFKVSLN AYLSDIMDRSFANLKNYQSTSESLKDL SEKFYKTSSEMFEKSDQSTSDISEILG GAIRFARFDDPSKALFEALRSDNIKKG LKDYKIADVTKDMFNADSKFKDIDIYD FTHYLLMVNREPNNFILKRLIEAVKD MQKE
HP1559	2135	CGCTGATGTGCGTTCAGGCCCATCAACCGGAATGCCACTCGTGTGGCTCAAGCGGATGTGAATTTCTTAAGA CACCCCATACATGGGGATTTAAAGCCGTGCGCTCGCTCGCTGCGAATTTAGAAGAGCTTACACCGAAACCGTTCCG CGCGTTCAATTTGCGTGAATGCTCATGACTCCTGTATTTCTGCTCATGGATGAACCGTGGGCATATGTATGGCA AGGTGCAATCCAGATTTAGAAGAGTGCAAAAGATGACTATTAATCGTAAGGAATTTCTGGCGGATAAAAAAGACT ACAAGCCCTTATGGGTGCGCACAGACGAGCGGCTGTTTGAACCCCTTTCTTTAAAGGTTATCGCTACCATGTTTCA GGCTGCACCATGGCCCTATTGGCTTCTCTACTGAAGACGCTAAATTTGGTGGGATTTGATTGACAGATTATTTAAT AAGATTGAATCC	2136	ADVMSRSGPSTGMPTRVAQGDVNFRL HPIHGDFAKAVAPANLE:EAYTETVRA FNLAEMLMTPVFLLMDETGVGHMYGKV QIPDLEEVQKMTINRKEFLGDKKDYKP YGVAQDEPAVLNPFCKGYRYHVSGLH HGPIGFPTEDAKIGGDLIDRLFNKIES
HP1559	2137	GATACGAAAAATTTAATAGGACTTTTTGAGTTTTTTGAGCATGGAAGCTGGCGAAAAAGTGTATGCGATTTTCAAT GTGAAAGCGGACACAGATTCCAACTCACCTTAGACAGCACAGGAATTTGGATAGCATTAAAGTTACTGAGGGGAG CGTGGTCAAAAAGGGCGATGTTTTGCTTTTATATAATCAAGACAAACAGGCTCAAGCGATTCCACCGAACAAACA ACTCATTTTCGCTAAAGCAATACCAACGATACAGCAAAATTTGGGGCGCTGTGGATAAAACACTCTAGAGGGTT ATGAGTTCACCTACAGCGCTTGGAGTCTGATTACGCTTATTCTATTCGGTATTGAATAAACCAATTTAAGAGCCCC CTTTTGATGCGGTGATAGCGAGTAAACATTCAAGTGGCGAAGGGGTAGCGCGAATAACACGGTGTATTGAG ATTAGTCAGCCATGCTAGGAAATTAGTTATTGAATTTGATTCTAAATATATTAATGCGGTCAAAGTAGGGACACTTAC ACCTATTCTATAGACGGGGATTCTAATCAGCATGAAGCTAAATCACTAAGATTACCCACGCTTATGATAAAACACC AGGAAAGTGAGCGCTGAAGCCCTTTTATCTAAGCCCTATGGCAGTGGGCTTTTGGCGATGGGTTATCCAAACGAA ATAATAGGATATTTGATGATAAAACAGCGATTAAATCGTCTATTACGACCTTAATGTTGCTTTGGCGATTGCTTT TTTGGGACTATGGGTTTAAAAAATTGAGCGTGGCGCTTTCCCTAAATTTGATTGCTACCGTGGTGTACTACG ACTTATCCTGGGCTAGCGCTGAATCATAGAGATAAGGTAACCGATAAGATTGAAGCGGTGATGGGATTG ATGGGATCAAAAAGGTTACTTCCACGAGTTCTAAAAATGTGAGTATCGTGCATGATTGATTGATAGAAAAACCTA ATGAAGAAGCCTTA	2138	IRKILIGLFLSFLSMEAGEKVYAFNVKA TQDSKLTLDSTGIVDSIKVTEGSVVKKG DVLNLLYNQDKQAQSDSTEQQLIFAKK QYQRYSKIGGAVDKNTLIEGYEFTYRRL ESDYAYSIAVLNKTILRAFFDGVASKNI QVGEVSAANTVLLRLV:SHARKLVIEF DSKYINAVKVGDTYTYTYSIDGDSNQHEA KITKIYPTVDENTRKVSAE:ALLSKPMAV GLFGDGFQTK

HP1559	2139	AAAATTGAAGCCCCAAGGTTTGCCCTATATGTCGCATGAGCTTTTGTCGAAGAGATTTTACTATTGTCAAAAC CTTAATTGCCCGGCAAGGTTGAAAGAAAGCTTGATTCATTTCCGCTTAAGACGCTTTAAACATTCAAGGCTTGGGC GATAAGTCAATAGCAACTTTTGAAGAAAGCTCATTTTAAACGCTCTGGATTGTATGCTTTAAATTAGAAGATT TAATGCGGCTAGACAAATTTAAATTTAAAGCTCAAAATCTATTAGACGCTATTTAAAGCAAAACCTCCCTT ATGCGGTTTGAATACGCTTAGGGATTGAGCATATTGTAAGGAGCGAGTAAACGCTGGCCAAATACGGCTTAA ATGTGTTAGAAAAAGCGAAGCCGAGTTTATAGAAATGGAAGGCTTTGGGTGGAATGGCGGCTCTTTAGTCAAT TTTTATGCGAGCAATCAAGAAATTTATCCGATCGTTATTGAGTTATTA	2140	KIERPKVCPICSHELLCEEIFTYCQNLN CPARLKESLIHFASKDALNIQGLGDKVI EQLFEELIFNALDLYALKLEDLMRLDK FKIKKAQNLLDAILKSKNPPLWRLNAL GIEHIGKASKTLAKYGLNVLEKSEAEF LEMEGFGVEMARSLVNFYASNQEFIRS LFELL
HP1559	2141	TTGATTGAAAAAGCGAAACCTTCTATGCGAAGATAAGGAAAAATGAAATGTTTGAATGAAAAATCCAGCGCGCTA GAAAGGGAATTGAAACAAAGAAATGAACATTTAGAGAACGCTTTAAAGAGCAAGAAATATTGAAAAACGCGATGGCTT TTAGAAATGAAAAACAAAAAGAAATCTTTCACAAATAAAAAATGGAATTTGAAAAATCCTACCAACAGCCCTAAATA TCTTAAAAAGCGAAGTCGCTTCAAAAGATACTAGCTCCATGATCAATAAGAAATCCATAAGCGAGCGAAATTTTAAAGCA AACACAAAGAACCAAGAGATCCACAAATCATAACGAACCTTCAAGCCAACGAAAGCGCGCTACAAAGAAATGAA AGCGTGCTGATTGTACAAATTTAGACAAAGGCTATTATTGGATAGAAACCGAGCTTGGCATGCGTTTAAAAAGCGCA TGGGAGTTTGTGAAAAAATCCAAAA	2142	LIEKAKTFYGEDKEKLNVLNLIENSALER ELKQKNEHLENALKEQEYLKNAWLLE MEKQKEIFHNKKLELEKSYQALNLIK EVASKDTSSMHKEIHKASEILSKHKTN QEIPQITNFQANEKARYKNESVLVQIL DKGYWIETELGMRLKAHGSLLKKIK
HP1559	2143	TGAAATCTTTTTGGCAAGAAATGATGCAACTAAACGGCTAGAAAAATGTGATCGATCTTTTATGGGATATGAATATC CCTGCTTTTATTAGAAAAACATGCCCTTTTGCAAGACATCGCGGATCTCAAGGGCTGCTTTTGGATAACAAACCT TGCCAAGTTTGAATTAGAGGTTTACGGCTCTATTAAATAGCCCTATAAAAGCGCGCTGACTTTTGAATACCGC TGCAAGCATTGCAACAAATCTTCCCTTTGAAAGCCATAGGTGCTGTGTACCAAGTTAGCGTTTATGGATATG GTGCTTAAATCTCTAAAGAAAGCTATGGGAGTGGAATGCAAGAAATTTTGGCATGCGCTCTCTCTT AGGCAATCCGGCCAGGGGT	2144	ENLFWQEIDATKRLNENVIDLLWDMNIP AFLEKHALLQDIARSQGLLDNKPQV FELEVLALLNSPIKARLTFEYRCKHCK QIPFESHRCPCVYQLAFMDMVLKISK ESYGSGLNARN
HP1559	2145	TGAAATAGGCAAGGGGTAGAAAGCTCTTTATTAAGGCTCAGAGTAAATGATTAATGGATCAAAAGGGGTTTTT GAGCAATCGTAGCGGAGGGTTTTAGGGGCATGAGCAATGGGAAGAAATCATTTGTAGAGTGCAATTTCAAACCC ACGCCAAGCATTTCCAACTCAACGAACCATAGACATTAATGGCAATGAGTGCGAATGCTTTGTTAAAGGGCAGGCA TGATCCTTGCAATTCGATTAGAGGAGCGGTGTTGCGAGAGTTTGTAGCGTTGTTGCGTATGATGTTATAC TCAATTTGACTTCAAAAATAGAGTA	2146	EIGKGVESLLKGSEYNDLMDQKGLS NRSGGVLGMSNGEEIIVRVHFKPTPS IFQPQRTIDINGNECECLLKGRHDPICAI RGSVVCESLLALVLADMVLLNLTSKIE
HP1559	2147	CACCCAGCGCGCAAAATAGGGATGGCTCGTTAAACAAATTTCAAAACATCGGCTCAGGACAGCCTGGATTATT TAGAAGAAANAACCAATAAAGGGGTGCTCCCTTTATATGAGGATTTGAAAGAAACAAAGGCATCAAGACACTCTAG CCAACCAAAATATTAGAGTCATCATCGCAACCGCTTATTACGCGGCAAGAGCCAAACGATAACAAACCAA AACCTCTCACACCCAAAGCTTGAAAAATAGTTTATGAAAAATACGGAAAAATCCACATCTAGAAAGTGTGGGAAAA ACACACGAGACACGCTCATTCAAAGCATCGCATGGCAGCGATGTTGTTAAAGATAGGGGGGTGATAGGCTTTG TGGTGAACGGGGTTTATTGACTCTAAAGCGCGGATGGTTGAGAAATGCGTGCCAAAGAAATTTTCGCATCTT TATGTATTGAATTTGAGAGGCAATCAGCGCACTTCTGGGAAAGTGTCAAAAGAGAGGGGAAATCTTTGATAG CGGATCGAGGGGACGGTAGCGATTATCTTTTGTGAAAGATAAGACACTCCTGATAATACGATTTTATTATGA AGTGAAGATTACTTGAAAGAGAGAACCAACTCAACTGGCTCGCCAAATTTGAAATTTGGATTTTGTGCCCTTTGA GAAATCACCCCGAATGATAAGGCGGATTGGATCAACCAAGGAATGACGCTTTTGAAGAACTCATCCCTTTAAAG AGACAAACACTCCAAACGACAGCGTTTGTGACATCAATCTCTGGCGGTGAGCGGTGCTGATCCTTGGGTGT ATAACTTTTCTCCAAACATTTTAACCCCAATCGGTGCAAAATGCATTGACACTTATAACGCTGATTGAAGCGCTTCAA TGCGCGTTTAGGGAAAGCTTTCAACAAACCGCTCAAGCGTCAAGCGGATCTTTACAAACAACTTAATGATA AAGAAATCACCAACCGAT	2148	TQAAQNRDGSLLNFKNIALTDSL DYLE EKTNGVLPYEDLKENKGIKDTLANQ NIRVIIGNPPYSAGAKSQNDNNQNL SH PKLEKLVYEKYGKNSTSRVSGKTTRDT LIQSIRMASDVVKDRGVIGFVWNGGFID SKSADGFRKCVAKEFSLHYVLNLRGN QRTSGEVSKKEGKIFDSGSRATVAIF FVKDKSTPONTIFYEVEDYLKREAKL NWLANFENLDFVPFEKITPNDKGDWIN QRNDAFEKLIPLKRDKTLQNDVSFDINS LGVVSGRDPWVYVNFSPNLTQSVQKCI DTYNADLKRFNARFREAFKQRAQSVK AGDLYKQNDKEITTDKTKIAWTDGLK NKLIKNSARES

HP1559	2149	AACGAACAAGAACCCCAATAAATCGCCTTAGAATTTATGAAGTTTGAGCAAGTTTGAAGCGATGTGCGGACCCCG CACTCTAGCGAACCGCCGCCACCAACCAACAGCTCAGCTCATCTATATGGCAGCAGCGCGGATAATATTGAG GGGATTTTGGACAGCTATAAGGAATGGCGCTGTTGTCAAATACGGGAGGATGGCTGGGATTTTCTTTGGT GCGCTCTATTGGGAGTTATATTGATGGCATAAAATGCGAGCGCTGGCAGCATCCCTTTTAAATAATCGCTAACG ATGTGCGGATTGCGGTGATCAATTAGGCACACGAAAGGCGGATTCGGGTGATTTGGAAATTTGGCACATTGA TGTGATGGAGTTCAATTGATTAAGGAAATAGCGCGATGAAGGCGGATGAGTATGAAAGATCCCAAGATCATTAGGAATACA TGACTGAGCTTTATGGCAGGATTTGAAACGCTATTAGAGTATGAAAGATCCCAAGATCATTAGGAATACA TTAACGCTAAAGATTTATGAAACGCTATTAGAGTATGAAAGATCCCAAGATCATTAGGAATACA CGCCAAATCGGTGCAACCCCAACGCTCATGAGGAATCATTCGATCCAGCAATCTATGACGAGATTTTCCAAATA CCGCGCTAACCACTACTACATGCAATAGAAATACCCGACGACCATAGAGTTTGAAGAAAGAGTTGGTA ACGACAGATAGTAATACATAATCGCTAACAAAGCTCACTAGCAGCATTTCTAAAGGCAAGCAATCTATATC GCTACTAAAGTCGCTAAAGACGGGCAACGGCGGTGTGCAATCTGGCGAGCATCAATTTAAGCAAAATCAACACTGA AGAAGACATTAAAGGGTTG	2150	NEQEPNKIALEFYEVLSKFEAMCATPT LANARTTKHQLSSCYIGSTPDNIEGIFD SYKEMALLSKYGGGIGWDFSLVRSIGS YIDGHKNASAGTIPFLKIANDVAIAVDQL GTRKGAIAYVLEIWHIDVMEFIDLRKNS GDERRRAHDLFPALWVCDLFLKRVLE DAMWTLFDPYECKDLTELYGCDFEKR YLEYEKDPKIIKEYINAKDLWKILMNYF EAGLPFLAFKDNANRCNPNNAHAGIIRS SNLCTEIFQNTAPNHYYMQIEYTDGTIE FEEKELVTTDSNITKCANKLTSTDILK GKPIYATKVAKDGTAVCNLAISINLSKI NTEEDIKRVVPMVRLLDNVIDLNFYPN RKVKATNLQNRAIGLVGMGEACJMLAE HQIAWGS
HP1559	2151	TTTACCACAGACAGATTTTAAAGAGCGGCTAATTTTACCAATGCCGAAGCGATTTCAAAATTAATAATTCTCA TCTTTATCCCGTTAGAGTGTGTATATGATGTAATGGTCAATTAACCTATAGAAAATTTCTTACCTTATAATCTAAGCAA TGTTAAGCTTAGTTTACAGACGCTCAAGGCAATGTAATCGATCGCTAGCGGTATAGAGACTATCCCCAACACTCTAA GATTGTTTACCCGGAGAGCGGTTGATAGTCTAAATTAACCTTATACCTTTATTTCTCCAAATTAAGAGCCACT AGCACTTCTGTTCTGACGCTAACACGAGAGGTTGTTGAACGCTCAATAAGATTAGACAGATTGGTCGTAAT TATAGGAATGAAACAAATTAAGATCACGAAATCATTTGGGAAGCTTTACCCCAACACCGCAGAGGAATTCAC AATTTGATGTTGAACATGATCGCTGTTTAGACTCCCAATCTTGGGCGATCGCATCTTAACGCTCCTTTTGAATTC ACTAATAAGACGGAGGAGAGG	2152	LPTDTILKRAANLFTNAEAIKLFSSLS PVRVLYMYNGQLTIENFLPYNL:SNVKL SFTDAQGNVIDLGVETIPKHSK:VLPGE AFDSLKIDPYTLFLPKIEATSTSV:SDANT QRFETLNKIKTDLVNRYRNENIKFKDH ENHWEAFTPQTAEFTNMLN:IAVLD SQSWGDAILNAPFEFTNKDGGI:
HP1559	2153	TGTGGCGTTGGCTTTTAAAGCGGGATTGAGCAAGCCCAATAAGCGATCAGTAATGCGGATTTGATTAAAGAGA TAAGGGATTTAAATAATCATCAGCGCGCAAAACACTGAGATTAACTTAAGAAAGTGCAAGAAAGTGTGTCTG GGCAATTAGGGACATGCGTAAGGATATATTAGCACTAGAGATTATTGCATTAGCTTAAGGCCCTTATATCTATAAT GGCGTAGGGGATAATCCAAATAATGAAGCATGCGCCATTCAATGATGCAATCCTTTAATGGTTGAAATAATGGTT GAAATAATGAGTTGGGGTTGTTCTCGCTCTATTCTGCTTATATGAGGATTTATAGGTTTGAAGTTTAAAGC ATGTTTGATCCACACGCTTGAATAAGCCCTCTTGTGGGTTGTAGGGTAAATCAGTCCCTTATTAAATATTC TATAATAAATTTAGGAATTCAGTTTAAAGATATTAAATAATGCCATACGCTTAAGAAAGATTTTCAACGCT TTGCGCTGATTGTTCACTTTTGTGCGATAAGCTTGAACGCTAAAGCTATCTGTTTCCCTTTGCCCCAGCAC ACCAGCAATCATTAGACAGAGCCTTGTCTTTGGAATGCTTGAAGACTTGATGCTGCAAAATCAATCTTTCTTT TGTGCTCAATACGATAACCAACCAAGATGAGAGCCTTAAACCTTATTATCATGACATCAATAAATCAACCCCG GTATTCATCGCTTCAACTCCAGCTAAAGAAAGCTATGAGCCTAAGATTAGCGGTTTACTGCCTAAAG GTGGTGGGCGTTATCGGATTTGCGGTGATGAACACCCCTTTTAGGGTATTGAACACCCAGAAACGATTTCATAT CCAAGTCTTTGACAGCGGATGAAGAAAGCCCTGAAATAATTAGAGCAACCTTAAAGAAATTGAAAGAAATTTCCC TTTTGTG	2154	VALAFLSADSAQANKAISNADLIKEIRD KKIISAQNTENNLRKVQEVLSGQLGDM RKDILSTRDYCISLRPIYINWR

HP1559	2155	AGTAAGCAATGCTAGAAGATTTTAAAGGGCTCTTTAGGCATGCAAGCGGGTGAAGAAAAGAAATTCCTTTGACT TTCCCTAGCAATACCCAGCAGAGCATTTAGCCGGCAAGAGCTTTTAAAGTGAAATACACCAGATTCAGCGG CGTGAAATGTTAGAAATCAATGACGAATCGTAAATCGTGTAGCTAATGAAGAGATGCGACTTTAAAGCTTTTA AAAGAAAGGGTTAGGGGCGAGTTGTTTTAGAAAATAAGCCAGGCTCTATAATGAAGAGTTGAAAGAAAATGATT GAAAATTTAGATGAAAAGATTGTTTTGATTTGCCTAAACGATCATAGAGCAAGAAATGGATTGTTGTTCAAGAAC GCTCTTTATTCATGCAAGCTGAGGAAGTCAAAATCCTTACAGAAAGTCAAGAAAAGCCAAAGAAAAGCGTGAGAG CTTTAGGAATGATGCGACAAAAGCGTGAAATCCTTTATCATTTGACGCTTAGCGAAGGAAAGAAAATTTGGCGT GCATGACAAATGAAGCTTTTCAAACTTTGATTATGAAGCGATGATGACAGGGCAAAACCCAGAAAATCTCATTGAGCA ATACCGCAAAAATAACATGTTAGCGGGGTGAAATGCGGATGATTGAAGATAGGGTGTAGCTTATTGTTGGATA AAAACCTGCCCTAAAGAGCAACAAGAAATTTAGAGAAAATGAGACCCCAACGCTCAAAAATCAAGCGGGTTAAAG GCTAAAAGGAGAGATGATGGGATACATTCCTTATGTAATAGAGAAATACCGATCGTGGGAGCGTAGCTATGATTT TACTCGCGCTTTTAAAGGATCGCATTTTATTGAGCGGTGAAATTAATGACAGCGTGCGCTTCTCATCGTGGC CCAACCTTTGTTTGGAAAGCTGAAGACCCCTGAAAAGACATTTGTTGTATATCAATTCCTCCGGTGGGTGATAAC AAGCGGTCTTAGTAT	2156	SKQMLEDFEKEALLGMQAGEEKEFPLT FPSKYHAEHLAAGKEAFFKVKLHQIAR EMLEINDELAKIVLANEENATLKILLKER VEGQFLENKARLYNEELKEKLIENLDE KIVFDLPKTHIEQEMDLLFRNALYSMQA EEVKSLQESQEKAKEREKRESFRNDATK SVKITFIIDALAKEEKIGVHDNEVFQTL YEAMMTGQNPENLIEQYRKNNMLAAV KMAMIEDRVLAYLLDKNLPKEQEQEILEK MRPNAKIQAG
HP1559	2157	CTTTTTGTTAGCGAGCTTGTGCTAGAGAGGAGCGCTTCTTCAACCTTTTGATTTGATTGATAAGGGGAT GAACAGAGAAACAAGAAATTAAGAGAGCAGGAGCAAAAACGCGCTTAAACCTGGCTCAAGCCCTTTAGTAGCGTTAG AGATTGTCCCCCAAGAACGCCCTATTTAGAAATGCAAGGGCTAGGAGTCGTATTATTTAAAGGTGAGCGCTGTA GTGGAGAGCGTGTATCTTAAAAATGACATCAATCAAGGGCGTTCTTGCTCGCTACCCACGCCCTAAAGCGT TTCTTTAGTGAGGAATCAAGCGTAGCCTATGAAATTTATGCGAAAACCAACCCCTATGGATAGAAAGTAAAGCACA TTTAGGCAACGCACTTTTCAAGTTTAACTGCAACCAACATTAAGAAATGCTTTAGCAATTTTAAACCCCTTTATCC AAATAAGTTGGTTAATGCTAGGCGATGGCGTTTTAAACAATGATCAAGGATTGATGAATGGTTGCTCCATTC TATAGATGTGGCTACGCAACATTTAGTTGCCATAGTATTAATAAGCGTGGTAAATATTTGATAAAAAGAAATTCAT GATCGCTTCATTTATATAGACTTGATCGCGCAGCATTTATCATCGTTGCGCTTTCTAGTTTTCTCGTGGTGT TTGGGGTTTGTGGGTTTGGTG	2158	FLLLASLVAREKDASSNLFDLIDKGINR EQELKEQEQKTRKLAQSPLEIVP QETPYLEWQGARESYLKVSAVESV VILKIDINQGRSCSLYPTPKSVSLVRNQ SVAYEILCENQPLWIEVSTNLGKRTFQ F
HP1559	2159	TATGATGTAACCTGGGCGGAGGCGGATACGGTGATCGGCTCTTAAACGCTCTTTTATTAGAAATCAATGAGCCTAAAGAT GCTTGGCGAGTTGCCAATGCGGCGGCGGTGGTGGTAAATGGGAGCGCGTTAGCGAGTTTAGAAGAA ATCGCTTTGATTTGAACCAACGCAACCTAAATCCTTTCTTAGAAAAGCTGTAGAAAATTTAGATCAGCAAAAA TCATTTTACCCTAATGGCTGTTTGACCTCTCCATAAAGGCGATGCGAGCTATTTGCAAAAGGCTAAAGCTTTAGGG GATAATCT	2160	YDVTGAGDTVIASLTLSLESMSLKDA CEFANAAAAVVGKMGSALASLEEIALI LNQTHPKILSLEKLETLTDQKIIFTNGC FDLLHKGHASYLQAKALGDI
HP1559	2161	GGATAACGCCGCTTAAAGAGAAACCCACCTTACACGCTAAATACGATGAAACCCACAGCCGTTTTTAATCGGCG ATGCGCTCAACACTTACTCTTTGAATGCTCTCAACGCTTATTAGAAAGCCATATCATTTGTGAAATTAATCAAAAT CTTAAGCGCTAATGGGGGATTAAAGGCGATGATCTTAGGGCAGGCTTTGGATTTGCTATTTTGAACACAGCCCTTAA ATTTAGAACAACCTCACCTTTCTACAGGAGCATAAACCCGCTAAATGATTAGCGCAAGTCTGATTATGGGCTTGTG CGAGCGGTATTAAGATGAAGAGCTTTTAAATGGCTTCAGGCTTTGGTTAAATGGTCTTTGCTTTCAAGTGC TAGATGATATTATAGATGTTACGCAAGATGAAGAAAGCGGTAAACCACTCATTTAGACAGCGCTAAACACAGCT TTGTGAATTTATGGGGCTAGAGAGGGCGGAATTAATACGCTCAAACTTTAAACACAGAGGTTTTAAATGATTTAGATG CATTTGAACCCGCTTATCCTTTATTGCAAGAAATTTAAACGCTATTGAACACTCTATTTAAAGGCAAGACATGAAA AAGATTTTACTCAACCAACGATGATGGCTACCATGCAAAAGGCA	2162	DNAALRRNHPTLHAKYDETTAVLIGDA LNTYSFELLSNALLESHEVILIKILSANG GIKMILGQALDCYFENTPLNLEQLTFL HEHKTAKLISASLIMGLVASGIKDEELF KWLOAFGLKMGCLCFQVLDIIDVTQDE EESGKTTHLDSAKNSFVNLGLERANN YAQTLKTEVLNDLDALKPAYPLQENL NALLNTLFKGT

HP1559	2163	TTTAGACAGGCTTGGCTAAAGCTTTAACATTGCTCAAAAAACAATAGAGCCTGGCGCTAAACCTATCTTTTAAACACAGCGCTGGCAGCGTAGAGCGTTATTAAACCTTTTAGATTGAGCGCTAAATAGAGATCCTATCAGCTTTAAACACGCTACATCTTACGGCTCATAGCCTAAATGATGATCTTATAGCGATGATACGCTATTAACCTTACTAGCGCGTTAATCAAATCTTAAGAGGAGCGATGAAACGCTTCCATCTATTATCTGGCGCTTATTGCTGGCGGGAACACCGGAAATTTATCGCAGAGGCTGGTATTGTTGGAGCGAAGATATTGGTAACGCTAACCGAACGCCCTTAATTTAGCCGCTTCTTGTTGTTGCGAGTCAAAACAAATCGGCTACCTGAAGCGGCATCATTTTAAGCCAATGCGTGATTATCTGGCTTGTTCGCCCAAGTCTAACACGGCTTATAGAGCGATCAATCAGGCTTGGATTGCGTTCAAAAAAGGCTCCTACTACCTATTCTAAACACCTGCTGCTAACGCTAAAGATTACCTTTACCGCATGATTATAAGCGCTATGTCAAACAAGATTATTGGAAAAACCCCTAGATTGGTTCTCTCAAGGCATAGGATTGAAAAACCCCTTTTAGAATGGCTTGATAAGATAAGAAATTGATCTTAAAGTTACATTAAATGCGACAATGGTAATAAAAAATCAATATTTTGGATTGAATTAATAATAGATTGATCTTATGTTTCATCGCATTTATTGTTATTAATATTCTAGTTATAAAAAATCATTTTACGGATAAGGAAGATACAGCATGAAAGATTAGAACTTTGGAATCCATTTAGAGCGCTTGAGAAATGTCTATCAAAAAAGCGACTCAAAATTCAAACACAGAGAGAAAGTGGTGAGCGTTTGTATCGCAGCGGCACACACCTAAAGCCCTGAAAGAAATCAG	2164	LDR LCAKALTLKKQIEPGAKTYLLNNS AGDARALLNLLDLAKIEDPITLKLQSL RPHSLNDGSYDDTHYNLTSAIKSLR GSDENASYLLARLIAGIGENPEFIARRL VIFASEDIGNANPNALNLAASCLFAVKQ IGYPEARILSQCVIYLACSPKSNATAYRA INQALDCVQKGSLYPIPKHLLPNAKDYL YPHDYNGYVQDYLEKPLDLVSSQGIG FEKTLLEWLDKIRN
HP1559	2165	ACCCACAGCTCCAAATCAACCCACACCCCAACCAAGGGCTAAACCCCAAGAGAGCTTAAAAAGAGAAAGAGAGAGCGATTGATGAAGTGTAAATTTAGAACTGGCTTAGGCTATCAACTCATCAGTCTTGGCGGACATGAAACAAGGGCGGATTGTTAGAAAGGATTAGGGGTATTAGAAAAAGATAGCGAGCGATTATGGTTTTTGATGCCTCAAATCCGGATCAGGATAATTTGCAGCTCCCCAACGCTTATGAAATCAAACTTAAAGGCAATTGTGATTGTTGAGGGCATGGTATGCCAGACAAGTTTACCCATGAATACCGGTTTTGTGAATAAGAAATTTGAAGGCAATTCCTACTAAAGAGCGCGCTTTTGGATGGACGCTTTATGGATTGAAACTAAAAATAAGAAAGAGCGCTTATTCAGGCTATACCATTTATTGATCCAGCACCGCTTATTGCGACGACACCGCAATAGTGAAAAAATACGCTGAAGATTTTATCACTAAAGATGAAGTGAATCCCTTTTAGAGCGCTTGGCCAAAGATTATCCTACGATTGTAGAGAGAGATAAAAAATCCCCACCGGTGCGATCAGTCTTGCAAGCCTTGTTACATGAAAAAATCCCCATTAAAGACATGCTCACTATTTTAGAAACGATTACCGCATTTGGTTCAAAACGATGTGAATATCTTAACCGCAAGTGAGGGCGGAGGCTTCTAGGGTATCACTAACGCTTT	2166	PHSSKIKPHTPTTRAKTQEELKREEEQ AIDEVLKIEFLELALGYQLISLADMKQG GDLLERIRGIRKIASDYGFLMPQIRIRD NLQLPPTHYEIKLKGIVIGEGMVMPOKF LAMNTGFVNKEIEGPTKEPAFGMDAL WIETKNKEEAIQGYTIIDPSTVIATHTSE LVKKYAEDEFITKDEKSLERLAKDYPT IVEESKKIPTGAIRSVLCALLHEKIPKD MLTILETITDIAPLVQNDVNILTEQVRAR LSRVITNAF
HP1559	2167	TTTGCCGCTTTAGACAAGATGACCTGAATACCCCACTATCCAGGAAATCAATCCTTGATTGCAAAACCCAGTATA GACGCTGCTTGCAATTTGCATGATGGCGGTGATACCGCCCTGTTTATGTTGATGCGATGCGATGCTCAATCCTAAAGCG CTGGGGAAATGCTTTATTATTGATCAAGATGAGGTTAAAGGGCGAAATTCCTAAATTTGCTTGCTTTTGCAAAACAA TACGATTGAGAGTATCAACGCCCATTTATTGCACCCCATTTGAAGAGTATCATTTAAAAAACACGCGCACCGCGCAAG GCGATACAGAAATGCAAAAGCCCTAACTTTTATGCGATCAACCAAAAAAGAGCGCTTTTGCCAAATGAAGCTAGCA AAGAACTCCCTTTAGCATCAAGGGTGTTTTACCACCTGCAAGCCATTGAGGGCTTACTCAATCAGCTCAATATCCCTT TTAAGCGCGATTITGA	2168	FAALDKNDPEYPTTQIEIKSLIAKPSIDAV LHLHDGGGYRPPVYVDAMLNPKRWG NCFIIDQDEVKGAKEFPNLLAFANNTIESI NAHLHPIEEYHLKNTRTAQGDTEMQK ALTFYAINQKSAFANEASKELPLASRV FYHLQAIEGLLNQLNIPFKRDF
HP1559	2169	CAATTACCCAAAGCCGAGTGAGGCTAAACGAACGAGAGATTACGATCTAGACTATGCGATCGTCAAAAGCGAAAGA TTTAAACCAAGCTTTACACAGGGCGGACGCAAAAGAGAACGGACATGAACGAAGAGCAGATTAAAGCATTGCTG AAAATTTTGATCCTAAAGATATTGGTAGCGGAGGTTTGAAGATTTACCGATCTTACATGACGCGGCAAGTGA TCGCAGGAACCCACAGATCCAAAGGCTGCTAAACTTACCGCTAAAGCGCTTTTCTTACGAGAGCGGATCAAG GAATACTATCAGACTTAAACCCGACGAGTTGTTAGTGAGAGTGCCACACAGCGCTAAACACACCCGAGAT CAACAAATTTAGCGCTTCAATCAAGGACGCTTCAATAGCGAAGCGATCAGCTATAGCGGTTTAAAGCCACT ATGAAGCCAAAGTTAAAGAAATTAGACCAAAATTAGACGCTGATAGCATCTACTCATTTAAAAAACATTGTTGCTAAAAA TTTGAATTTGATAAGGCTACGCATCCTAATGTAAACCGATAGTAATTTAGCGTTGCTGATGTTTAAACATGCCACGAAC CAAAACGCAAGGATAGAAATTACTCAACCGCTGCAAAAGAAATTTTCAACGACATTAAAGCTATGAAAAAGTAAA AAAAATGTTTGTAGATAACGCGGCGAGTTTCACAATCTCATCCAGCTGCAACTTCCCTAAGGTGAGTTTAAACGCG TTATTTAAGCGATATTATGGATCGCAGTTTTCGCAATTTTAAAGAAATTACCAAGCACGAGCGCTGAAAGATT GAGCGAAAAATCTATAAACCGAGTTCTGTAGAGATGTTTGAAGAGCGATCAAGCAGCGATATTAGCGGAG TTTTAGGAGGAGCGATCGCAGATTGTCACGATTGATGATCCGAGCAAAAGCGTTATTGAAAGCCTTAAGAGCGGAT AACATTAAAAAAGGCT	2170	QLPKSRVRLNEREYDLDYAIVKAKDLK PSFTTGGTQKRTDMNEEQIKSIAENFD PKKIFSGGFGFEDLPILHDGQVIAGNHRI QGMLNFTPKSRFSYERAKEYYYHDLK PDELLVRVPHKRLNNTENNLAASSNQ GRFNSESDHAIASVLSHYEAKLKELDOK LDADSIYSLKNIVAKNLNFDKATHPNVT DSNLALLMFNMPRTKTQGIENLRWKK EFSNDIKSYEKVKMFVNDAGSFHNLJ HDLNFPKVS LNAYLSDIMDRSFANLKN YQSTSESLKDLSEKFKYKTSLEMFES DQSTSDISEILGGAIRFARFDDPSKAL FEALRSNDNIKKGLKDYKIADVTKDMFN ADSKEFKDIDYDF

HP1559	2171	ATTGAAGAGCCAGAAAAACGCTTTTATAGAGCAGCAAAAGGCTTGGAAATGTTGCAAAAAAGAAATGGATGAGAA GTCCAAACAAGTTCAGGAATGCACCAAAAAGAGCGGAAATGAAAGGCTAAAGAGAAAAATACGAAGCCGAGA GCCGATTAAAGCTGAAATGAAAAAATGAATGAAAAATGGATGAGAGAGAAAAATAGAAAAAGCCTTGC ATGAAAAAATGAATTGAATCAAGCAGCAAGAGCAATAGAAATGTTAAGAAACGAGTTGAAAAACGCTCAAA GAAAGCTGAATTAAGTTGCAACAATCCAGGGCAGGTGCAAGAAATGGCGATTGAAGAGTTTTGAGGCAAAAA TTCCCTTAGATTGCATTGAAGAAATCAAAAAAGGCAAGAGGGCGGATTGCATTCAAGTGGTGATAGGGA ATTTCAAAATTCGGGAAAAATTTATGAGAGCAACGCCAACAAAGATTTCAAAAAGCTTGGGTGAAAAAGCTTAA AAGCGACATGCGAGAGATTGGGGCTGATGTGGGGT	2172	IEEARKNAFLEQKQGLELLQKELDEKS KQVQELHQKEAEIERLKRENNEAESRL KAENEKLNKLDLEREKIEKALHEKN ELKFQKQEEQLEMLRNELKNAQRKAE LSSQFQGEVQELAEIEEFLRQKFLDCI EIKKGQRGDCIQVWHTREFQNCCKI YYESKRTKEFQKAWVEKLKSDMREIG ADVG
HP1559	2173	ACAATAGCGACAAGTTTATTAGCCGCTGTAGCACTGGTGATGTTAGTGAACAAATAGAACTAGAACAAAGAAAA CAAAAGACGAGCAATATAGAGACTAACATCAATAAAGTAGAACAAAGAAAAACAAAGACAAATATAGAGACT AATAATCAATAAAGTAGAACAAAGAACAGAAACAGAAACAGAAAGACAGAAACAGAAACAGAAACAGAA GACAGAACAAAGAAACAAAGACCATTAACACAGAAAGATTTCAATAATGTAGAACAAATGGCCAAAGAAA TCATAATCAATCTTTATTGAAAAAGGAGGAATTAAGGCTGGTATTGGTATAGAAAGTAGAAGCTGAATGCAAAACCCC TAAACCTGCAAAACCAATCAACCCCTATCCAGCCAAACACCTCCAAACTCTAAACAAACCCGCTCTCAAAAGAG GATCAAAAGCGCAAGAGCTTATCGCTTATTGCAAAAAGAGCTAGAATCTCTGCCCTATTGCAAAAAGCTATCGCTA AACAAGTGATTTTATAGACCAAGTTCTATCGCTTATTAGAACTAGACCTAGAGATTTAATGTTACAGAAGAAATG GCAAAAAGAAAAATTAATAACGCTCTAAAGCTCAAGCTAAAATGCTTGAATGAGGAGTTAAACCCAGACTCAAC AGCCACCTTCAACCTCTCAAGGCTTTTGTGTTCAAAAATATTGCTGATGTTAATAAGAAATAAAGTAGTT GCTAATACTGAAAAAGAGCAGAAAAAGCGGGTATGGTTATAGTAAAGGATGAGGCATAGAAAGAAACACCATAAA ATCGTTCTAGCTTATTATAGTATTAAACCTATGTTAC	2174	TIATSLLLAACSTGVDVSEQIELEQEKQK TSNIETNNQIKVEQEKQKTSNIETNNQI KVEQEQKTEQERQKTEQERQKTEQ EKQTKTKQDFIKYVEQNCQENHNQF FIEKGGIKAGIGIEVEAECKTPKPAKTN QTPIQKHLPSKQPRSQRGSKAQELI AYLQKELESPLYSQKAIKQVDFYRPS SIAYLELDPDRFNVTEEWQKENLKIRS KAQAKMLEMRSLKPDQSAHLSTSQSL LFVQKIFADVNIKEIKVVAANTEKKAEEKAG YGYSKRM
HP1559	2175	TTAAAAACCCCTATCGCTCAAGAAGAGTGGATGCATTAGCCCTGGAGTTGGCACTATTATAGAACAAAGCTTTT GATAGGGAGCATTTGAATAGCGAAGTGGATGGCATTTATTGATAAGCATTAATAAATCATGTTTCCATATCGCTCA CGGGCTTGATAGCGAATTGCAAGTGTGTGGAGTTTAGGGATCATTAAGTATTTAAGAGCGTTGAAGGGAG TCCGCTAATAAACCCAGATCATCGCTAATATCATTCAAAAATACGCTATAACCCAGCGCATGCTAATGATAGG CGATAGCGTCAATGACTATGAAAGCGCTCAAGCTAATGAAGTGGCTTTTGGTTACAAACAGCAAGTTTTGAAAA ATTTAGTGGTCAAAACGGCTATCAAGGGAGTATTGGAGAGCTTAAAGGGTTTGATTACAAAACTTTATATAAAAG AGTAAAGCCAGCTTAGCCGAGATTGCTTTGTGTGGCTCATGTCAATGATGACTCACAGCGTTCAATCGTGC	2176	LKTPAQEEVDALALEFGTIEQKLFDR HLNSEVMAFIDKHYKNHVFHIAAALH SELQVLCFLGLIYFKSVESGPPNPKP IIANIIQYAYNPGRMLMIGDSVNDYES AQANEVAFGLGYNSKVLKNLVQGNGYQ GKYLESEFKGFDLQNFKE
HP1559	2177	GTITGGGAAGAGGTGCAACGATTTATCGCACCGATTTGAATAAAATCTTAGATGAAGATTTGATCATGTTTAG CGTGTGCGAGAAATTTGATAAGAAATTTGATTTACAAATCCATTGACACCTATTCTAAGCGTATGAAGCATTGAAAT GAAGTGCATGAAAAATCAAGCATTACAAACGCAAACTGCCGTAGGAGCGATGAATACGAGTTGGTGTGAAAG GCTCTATGAAGAAGAAATTAAGCGCAAGGGTTTTTATATGGTCTCTCTATTTAGAAAAACGGCTTTTTTGGCAA GCGCAAGTTTGGGGTAGCGGCACGCAAGCGGGCGAGCTGTTTTAACACTCTATGAGCGGTTATCAAGAAG TCATTAGCGACCTAGCTATAAGGGCAATTTGTGGTTTTAGCATGCTGAGATTGGGTTGTGGTGTCTAATCT AAAGATGATGAATCTTTTTTTCATGCGCAGGGTTTTAGCGCGCCATTACAAACGAATTTTTCTAACTCAAGGGCG GATTTTAGCTTGAGCGCTTATTGAAAGAGCGTGGCGTTTAGGGGTTGTGGCGTTGATAGGAGTTTGAATAA ACCTTAGCGCCATCATGGGTGCTTAATGATGGTGGCTTCCACGATAGAGCATGACAAAAACAAAGCTTGAAG	2178	FWEERCNDLSHQILNKILDEDLIMFSVS ENLRNLKYSIDTYSKAYESIENEVEHEKI KHYKRKLPGSDEYELVFERLYEEELR RKGL

HP1559	2179	CACGAAAGCCAAAACACGCCACCATCTCACTAACACCCCAACGCTCATGGATGAAGAAAAGCATCATGCAAA CTTATGATGTCAACACCCCTAGAGTGTGGCGTGTGGATAGAGTGGGAGTGGCAATTGCAAGACATGACGCA TTTAACCGCGGTAGAGCACCAACCTATGCGGTGGCTGATGATTTAAAGCACCTGGATTTTGGCAAAAGCCTTGT ATGATCCTAATTTGTGCATCATGTGTGAAGGTGCGTAACCACTTGTAAAGACAAATGTGGCGAAACCAACCTTAAA GCCACTAAGCCGACTTGATGCTGCTCCGATAAATTTAAAGACAGCATGTCCAAAGACGCTTTTAGCGTGTGGAGTCG TAAGCAAAAAGGCATTATTCTTTGTGGCAGCGTGCCTTGCTATGATTGCGGGAATGCATTCAGTATGCCCTG TGGCGCTTTGAGCTATAAGATTTCGCTTACACGGCTAACGCTAGGAGTTAAAGAGATCCATCTACTTGTTCGC ATTGCTCGCGCGGTGTTTATGATTTTATGATGTGGCGCATTTGATCTAGGCGAAGAACTCTAAATTTTAGAG TGCTTAATGATTTTACCATAACCCCTATTGTGGCGAGCGCTTTCGCTTTGATGTAGCTCTAGCCCTAAAGGCA GTGCTAATCTTAAAGAGCGCAAAACGCCCTCAAGAAATGCGAAGCGGTGCGAATAGGTGGGATATTACGAATGA AGAGCGGTTTTAATAGAGCGTTTAAAGAAAGAGCTTGATTTTAAATCTACAATCAAGAAAGCGTATCGTTCCAGCA ATTCTTAAAGTATTGGCGGAATTAAACGCCCGAGCGTTGAAGAGATTAAACTTCTCATTTAGTCGTTACGATAGG ATCTTCTATCAAAACAGAAACCCCTTTGGTGGCTATGCCATCAATAACGCTCTCAAACTCAATAAAGCTTCTTTAATC GCTATGCACCCCTATTAAAG	2180	TKAKNNATILNTPTLMDERKSIQTYD VNPLECGVCDKSGECELDQDMTHLTG VEHQPYAVADDFKALDFWAKALYDPN LCIMCERCVTTCCKDNVGENNLKATKAD LHAPDKFKDSMSKDAFVSWSRQKQGI SFVGSVPCYDCGECIAVCPVGALS YKD FAYTANAWELKKIHSTCSHCSAGCLIS YDVRHFDTLGEESKIFRVLNDFYHNPIG GAGRFADVSSSPKGSANLKEAQNAL KECEAVRIGGDITNEEAFLIERLRKELD FKIYNQEA YRFQQLKVLGEIKRPSVEE IKTSHLWVTIGSSIKTENPLVRYAINNAL KLNKASLIAMHPIKDNALANLCRSSFCI THEVGAEEILLGMLLMLNIESAALKSL EDSKQNVDEAALKALEEERKKALEQA EQGCSIGNENKAENQENKTEATTPKEE NQEENK
HP1559	2181	GGTGGTCCAATCCAACCCGTATTATTTCTACGCATAGCGAATCAGCCCTAGACTTGCTCAAGTTATTGAAAAAAA CCAGATGAATGCAAGCGCGATTGAGATCGCTCACTGCTCACTCAATCAAGATGATGATCTGAAAGCTAAAGAGCAAG CGCTTTATGATTTAGGAGCGTTGTATGCAAGGATCAAGGACTTAAACCGCCACCTTTACAATCTGCAATATTTGC AGGACCATGCGGAACCTGATGAAGCTTCTGCTGTTAGGGCGCGGATGAAAAGCCCTTTTCCATGGAGGGGAA CAGCGAAGAAAATCGCCCACTATGACAAATCATTCAAAATTTCCCTAATTAATGAAGCCCTAAAGGCTTTAGA ATTGAAAGCCCACTATTGTTTGAACAAAGCGTTATGCTGAAGTGTAAAGCATGCAAAAATTTGCTAAAGATTG CCCTTTGATCCAAAACCGCTCAATGCTGCTTAAACCCATTAGAGAACCATGTTGTGAAGAACGCTTAAATA TTTATCCCAATCACAACTTTGAATTCAGCCCAAGAAAGAAATCCAAAGCCTTTGATTGCTTTGATTTCGCATCGCT CAAGAAAAGCGCAATCATTTGCCCTAAACGCTTTTAAACGGCTAAAGCCCTAGCGAGAAATTAATATG	2182	VVQSNPDYISTHSESALDLLKLLKKNQ MNASAEIAHLLNQDDDLKAKEQALYD LGALYARIKDFKNAHL/NLQYLQDHAE LDKASVVRARDEKALFMEGNTQEKIA HYDKIQNFPNSNEALJKALELKAQLLFE NKRYAEVLSMQKNLPKIDSPLIQKTLNV LAKTPLNHRCEEEALKYLSQITTFEFS KEEIQAFDCLYFASLKE:KAQIIALNAFKT AKAPSEKLI
HP1559	2183	GAAATTTAGGGGTAATTCAGAGAGAAAACCTCATCCACCTAACGATGACGTGAACATGCTCAAGCTCCAA CGACACTTTCCCTACCGCAATGCACATTTGAGCGTGTAGAAATCACGCACAGACTGCTCCCTAGTTTGGAGAATC TGTTAAAACCTTTAAAGAAAAGCCCAATTTAAGAGATTGTCAAGATCGGACGCGACGCTTACAAGACGCTA CGCCTTTAATTTAGGCAAGAAATTTAGCGGTATGCGAGCATGCTAGAGCATTTCAACACAAATTTTAGAGAGTT TGGAGCATTTAAGAGAAATTAGCCATAGCGCGGACGCGGTAGGCACAGGCTAAACGCTCATAAAGAAATTGAGCGA AAAAGTGGCTGAAGAAATTGAGCCAGTTTAGCGGCGTGAATTCGCTCTGCGCCCAATAGTTCCATGCGCTCACTA GCCATGACGCTATCGCTTATGCGCATGGGCTTTTAAAGCTTTAGCGCGAATTTAATGAAAATCGCTAACGATATTA GATGGCTTGGAGCGGCGCGCTGTGGTTTGGCGGAGCTTAATATCCCTGAAAACGAGCGCGGCGAGTTCTATTAT GCCCGGTAAAGTCAATCCACGCAATGCGAAGCGGATGACAAATGGTGGCCG	2184	EILGNGFREKKLIHPNDVNMSSQSSND TFPTAMHIVSVLEITHRLPSLENLLKTF KEKSQQFKEIVKIGRTHLQDATPLTLG QEFSGYASMLEHSHKQJILESLEHLREL AIGGTAVGTGLNAHKELSEKVAEELSQ FSGVKFVSAPNKFHALTSHDAIAYAHG AFKALAANLMIANDIRWLASGPRCGL GELNIPENEPGSSIMP:GKVNPTQCEAM TMVA

HP1559	2185	ATTAAACGCTGTCTAACGATAGATTACGCCAGATGAACCAAGTATTTAATGCTCTCTCTACTGGATGGCTATA TCCAAACGAAATAAGCGCTTAGCCCTTTAGCGCGCTTGAAGAAATTCACCCGATTAGAGAAAGCTAGAA AAAGAAAGCGGATTGTAGAGATAAAGCGTTTCGAAAGGATTAGAGAAAGCTGAATTTGAAATAATGAAA TTAGAGAGGCTGGATTAAAGAAAGATGAATACGACGCTTTTAGAGCAAAATAATGCTTTCTAGTAAGGAAAA CTGAACGATAAATCGCTCTGGCTTAGAGGTCTAGAAATACCCATAAATCACGCATGCTTTAGAGAGCGTGGG CCATAGCGCGGAGTTTAAAGCGCTTTATTAGAACGCGCTCTATTGGAAAGAGCAGGCTAAATTAGAAAG AGTGGAGCGTTTGGACATTGAAGAAAGTTCTAGAAAGCTTGGCATGCTAAGTGGGATCATTAGGATTACGGGAGT ATTATGCATGCTAAAGAACGATTAGGGCATGTTAAAGCAATTCACAACTAAAGAAATGATAGTCAATTGCGAA ACTTACCACAAAGAAATAGAGCGATTAAAGCAATGCTTGAATTTGCGAAGAAATAAGCGGCTTTAGAAAA GTATTTAGCGGTTTAAAGCTCTTTAAGCGCTAAAGCGAAAGATTGCTCTAAAGCCCCCAGTTTGGTTTGA AGCGCCCCCATGAGCGAAAGAGGCGCTCAAAACTCGTTTGAATTTGCA	2186	IKRLSNDRFSQNELNDILMLSLDDGYIQ NENKAFSPLLGALEEKFTRLKLEKER RLLEDKKRFQKDLERLNFEMKLERL DLKEDEYERLLEQKLLSSKEKLNKIA LALEVENTHKITHALESVGHSAEFLKS ALLEASALLEKEQAKLEECERLDIEKVL ERLGLMSGIKDYGSIMHAKERLGHVK NELHNLKEIDSHCETYHKEIERLKTECL KLCEEISGFRKEYLAGFNALLSAKAKDL LLKSPSLVLEDAPMSEKGAQKLVNLQ
HP1559	2187	ATTTCCAACCCAGAGATTTACGCCCTTAGTGGAATAATTGACATCCCTTATTATGCGCCTTGCGACAATCAAG TTTTGCATGAAAGAAAGTTTAGAAATCATTAAGCACTGGAATTAAGCACAAGTGAGTGCAGACTTGCTCGTTT AGCCAAATACATGCGCATTTAAGCCATGATTTAGGAAGCGCTATGAAACCCAGATCTTAAATATCCATCATAGTTTC TTGCCCGCATTCATTGGGCTAATCTTACCAGCAAGCGTTTGAAGGGCGTGAAGTCAATCGGGGCCACGGCGC ATTTGTGAATGAAGCGCTTGATGCTGGCGGATTCATACAGACACTCTGCCATTAAACCACAATTACAGCGTGG AAAAATGCGCTAGCGGTAGGATATAGAAAACTGGTTTAGCTAGGGCTTTAAACTCGTTTAGAAGACAG	2188	ISNHEILRPLVEKFDIPYFYAPCDNQVL HEKEVLEIKNLKHKVSAADLLVLAKY MRILSHDFTKRYENQILNIHSHFLPAFIG ANPYQDAFERGVKVGATAHFVNESLD AGPIIQDTLPINHNYSVEKMRLAGKDIE KLVARALKLVLED
HP1559	2189	GGAGCTTGAAATTTAAATCTTATCTTAAATCCCTTATCTTACTAGAGACCAACCCCTAAATTCGAAGCTTGT TTGAAAGATTGAGCCAAAATCAGCGCTTTTCCCAACTAGACACTCAAAACAGCTCTTACTCACTTCCCTA GCCCAAAAATTCCTAGAAAACGCCATTACTGAATTCGAAACGCTAAACCAATTTAGAACTTTAGAGCTTTT CTTATCACATTTAAGCGCGATAGAAAATTTGAATGCTCACCGCTTATGAAACCCAGCCAAATGCTAGACAGCA TGTTACGCGAATTTGCTTAGGCAATGAACCGCTTAAAGAAATGGATTAAAAACCCCTTTTAGCGCTACTTTTAAAG CTTTTACCCATTAGTGGGTTTAAATACCC	2190	ELEILKSYLKIPYTLLETNTLNSKACLKD LSQKISAFFPKLDTQNKLLTSLAQKIAL ENATELQNAKNHLETLLELFSYHILSAIE NLNLLTRPYETSQMLDSMFSEFCLGK
HP1559	2191	TTACAACCAATTTCTAGCGGTAATGGCAGTGGTTCTAAACCCCATGCCCTCCATAGCAAAACCAAGAAACTGCA CGGCTAAAGTGCCGCTTACCTCTCAAGACGCCAAGAAATTTGACCAATTTAATGCTGAATATGATGGCGGTGTT GATTCTAAATCTTGGGAAGATGCCGTTAAACCGCTCCCTTCAGTTAGCGAACCAACTTGTACGCGCCATGTTAT TCTAATTATCCACATGCGTGAATCCTTACAACGATGGCTTGTGATCCTAAATGATCGCTAAATAAAGGAGAT GAATACAATATAGAAACGGCAACAGGCTCAGTGATATTAAACCGCCGCAAGATGTTATCTATAGCTATAGGGTTAC GAATAATCTTTATGTGAATCTCTTACCCCAAGAGGAGGGATTAGGGCTAGGCTCAATATGGCGCCCAATG GTCCAGCGGATGATGGCACCAATTTGGCGCTTAGGGATATTGCTCTCTTCTAGACCTGAATACTGTTTGGCA AAGAAATTGAATAAAGTCGCCATCATGCAATTAAGAGACATTATCCATGAATACGGGCACACTTTTAGGCTATAGCATA ATGGGAACATGACTTATCAAGGGTGGCATGTGTGAAGAAACAATGGCCAGAGAGCGCTGTAA	2192	YNQFSSGNGSGSKPPCPYPYENQENCT AKVPPFTSQDAKNLTNMLNMMMAVFD SKSWEDAVKNAPFQFSDNNLSAPCYS NYSTCVNPYNDGLVDPKLIANKNGDEY NIENGQTSVILTPQDVVYSYRVTNLY VNLPPRGGDLGLGSQYGGPNPGD DGTNFGALGILSPFLDPEILFGKELNKV AIMQLRDIIEYGHGTLGYTHNGNMTYQ RVRMCEENNGPEERC

HP1559	2193	ACGGAGTTTTGGCGAAAGATTGGTGGAATAACGGGATTTGGCGAGTCAATCACGGATTATCAAGGCATTGT GGGGATAGCAGCGATAATTACAAGGGGTAAAGGCATTGGGAGCAAGAACGCTAAGGAATTGTTGCAGCGATTA GGGAGCTTGGAAAAATCTATGAAAATTTAGACTTGGCGAAAATTTACTAGCCCTAAATGTATCGAGCCCTGATA CAGGACAAAGCAAGCGGTTTTTAAGCAAGAATTAGCCACTTTAGAAAAGAGGATGCATTAAAGAAATTTGATTTTTTA AGTTGCGCTTTTCTAGCGAAACCCCTTATTGAAAATTAAGATGAATTGAAAGAAATATGGTTCTACTTTTAA GGGATTTAGAGAAATCCCTACGCTTTAATTTAGACAACGCCCTTATTAGACAACACGCCCTTAGACAAC ACCCCTAAAAATCATGATGATCGTTTGGAAAGCGCCGACCTTTGAGCGGTTTTAGAAAACCTAGAAAAA AACGCAAGGGTTTTGCGGTTTGGTGCTGGATAAAGAAAAGTTCTGCGCCTAGCGTTTTATATGAAGATCAA GGCTATTTTACCTTTAGAGAGGCGTATTCTGCGCTTTCTTTAGAGTTTTGCAAAACGCTTTTTTAAATGTT ACAGCATGCGCAATCATTTGGCATGATTTAAACCTTTGTTGAGCTTTTAAAGCCAAATACCGGTGCTTTAGA AAACATTCGCATCCAAAGACACTCAATTTAGCGTTTTTAAATAATCCGGAAGAGTGGGTTTTGATGAAGTTTTAA GGAATATTTAAAGAAAGATTGATTCGCATGAAATAATCAAGATTTTAAGACTAAAGCGGAGAAATTTGAACTTTTA AGCGTGGAATTAACGCTTTAAAGCGTTTGTGTGAATATTTGAAAAGGGGGATTGGAAGAAAACCTTGCTTTCTTG GCCAGAGAAA	2194	TEFLAKDCVEKYGILPSQFTDYQGI DSSDNYKGVKGIGSKNAKELLQRLGSL EKIYENLDLAKNLLSPKMYRALIHDKAS AFLSKELATLERGCIKEFDLSCAFFPSE NPLKIKDELKEYGFISTLRDLENSPTPL ILDNAPLLDNTPALDNTPKKSCMIVLES AAPLSAFLEKLEKTNARVFAARLVLDKE KKVLALAFLYEDQGYFLPLEEALFSPFS LEFLQNAFFKMLQHAQIIGHJLKPILLSF LKAKYQVPLENIRIQDTQILAFLKNPEK VGFEVLKEYLKEELIPHEKIKDFKTKA EKLELLSVELNALKRLCEYFIEKGGLEE NLLSLAREIETPFMKVLMGMEFQGFKI DAPYFKRLEQEFKNELHVLERQILELIG VDFNLNPKQLS
HP1559	2195	GGCGAAAGCTGTTGAAGCGTTGTTTAGTGAGATTGTGGATAGTTGGGCATTTATTATAAAATCGGTCTTAGCACG GATTTTACCGGTAAATGTTCAATGAAATGTATCGCTGGCTGGTTTACGAAAGACCAATTAACGATGTGTGCTC ACACCCCTTATGTGCCACGCTTTAGCTAGACTTTCTAAGTCAATAAGGATAGTTTCTGTGGGATTTTGCCACC GGAAGCGCTGGCTATTAGTCGCAAGCATGAATTTGATGATAGAGAGCGTAAAGCGTACTACTAGTCCAGAGGA ATTAGAGCAAAAATCGCCACATTAAGCCAAAGCAACTTTAGGATAGAAATCTTATCGGATATCCATACTTTAGC GGTGTTAAACATGATTTAATGGCGATGGGAGCAGTCAATCTTAAACCAAGACGCTTGAGCGGTTTTGATGGCA AAGTCAATAACGAAGCGTTTGAAGCTAATGCCCTTTGTTTTAAACCCG	2196	GESCLKRCFSEIVDSLGIYKIGLSTDF TGKLFNEMYRWLGFTKQDLNDVWLT PYVATLLARLSKVNKDSFWDFATGSA GLLVASMNLMIEDAKKRITSFEELEQKI AHIAKQLLGIELSDIHTLAVI.NMILMG DGSSQILNQDGLSGFGDGKVINEAFKA NAFVLNP
HP1559	2197	TTTGACAAAGCCGCTTTTTCGAAGGATTGGAGCCATAATTTAGGGTGATTAGTTAAGGAAAAGGATTTT AATGGGCGTTGGATTTGTTGATTTAGCATCGCTTCTAAAGAAAATCGGAGCGTGAGCGGATGATGCGTTAGT GAGCGCTTATCATTTGCAAGATGAAGATTTGTATTATCATTAATCTAAATTCGAGAGACACATTTGTATAAAGACTAT AAAAGTCTTTTATCTACGCTTACGCGCTCAATCCTATTACGCGGGAGTATTTTGAAGCCCTTTTCGCCCTTA ATGCACCTTAATCCAACGCTTTTAAAGCCTAATACGCGCTTACGCTAAATTTTGTATGTTTAAAGATGAAA CGAACGCTTACGAGCAATTACAAAAGCGCAACGCCCAAGATGAGCTTGTAGGGCTTTTGAGCGCGCTTTG GGCCATTACAAGCAGCGCTTTGGAGCATTTGCAGCATTTATTCACAACTACCCCTAAAGATTAAACGCTTTGATGGCT TTGGAATTGGTGAGTTTGAAAAAAGCGACACCCCTTAAAGCGAGCGAAGCCTTAAATAGCCAGCCACACCAAGA AGACAÇGCTATTAGCCA	2198	FDKAASFQSIASHNLGVIKFEKDFN GALDLFDSSIASKENASVSAIDALVSAY HLQDEDLYYHYLKIARDLYKDYKKS YSYAYALKSYAGYEYFEALSPLMHPNS NAFLKPNTRLASKLFLMKDIE:TNAYEQ LQKSANAQDELALGLLQARLGHYKQAL EHLQHYLHNYPKDLNALMALELVSLKK GDTLKASEALKLASHTKEDTIL.A
HP1559	2199	AATGAAGTGATCGTTTGAAAAAGCTTTCCACTTTTCAAGAGCTTTGTAGCGTGATTACGGCATGGTGTAAACGCA GAAGTGGCTGAAACTTTAGAAGAGGTGGAAGGCAATTAAGCATTTCAAAACGCTTTGAAATGCAAAAAGT GGGGCAATCGCTAGGTAGAAACCTTAGCGCTCAAGTGGCTTATGATAAGGCCCATATCGCTAGCGTTAAGGCT AAAGACGTGTAGAGTTTGCAGCTCTCGTTCAATTCATTTATCTAGCAAGGACGATTAGTGCCCTTCAAGCAAA TTAGAGATCCGACGGAGAAAATCTGCCGATCTGAGCTTTTGTCTTCCACGCTCAATTCCTACCCGTTTTTA AAGACTTTAGAAAATCAGATTCAATCTCTAAAGAAAACACGAAATACAGATCGCTAAATCTTCCCCAAGTGAGTT TTTTTGGCTCTTATATTAGAACCAAAATTCGGTGTGTTGAAGACATGATCCCTAGTTGTTGTGGCGGTGGCCG GGCGCATGCCATTCTTCTCCACAGGGCGCATTCAAAATACCAAGCGGAGCAATTAGCGGAGTTGCAAGTGAGT AGCGAACAAATCCAGGCTAAAAAAACATGGAATATTAGTGAATAAGACTTATAAGAGAGCGCTTTCTTATTGAAA GAATACAAAGCTTGCTTCTAGCGTGGAAATTAGCCAAAGGAAACTTAAACTCAAGAG	2200	NEVYRLKILSTFQELVSVVYGMVLNAE VAETLEEVEKGYKHFNALKMQKVG QIARVETLGAQVAYDKAHIASVKAKDV LEVSQLSFNSILSSKDDLVPSKLEIRT EKNLPDLSFFVSSSTLNSYPVLKTLENQI QISKENTKQIAKFLPQVQFFG3SYIMKQ NNSVFEDMIPSWFVGAGRMPILSPTG RIQKYQASKLAELQVSSESEQIAKKNME ILLVKNKTYKETLSYLKEYKSLSSVELAK ENLKLQE

HP1559	2201	AAAGCGCGCGTTGATTAAAGATGGCTTTTAGCGTTCAAAACAGCCATTACGCTGAAGCGTTACGCCCTTTTCTGA AGTGTGTTTTGGATAAGACAAACCAAGAGTAGGGGCTTATTAGCGACATCGCTAAGGATTTCCCTAA AGAAGCCCATAGCTTTTATGAATTGTATCAAGCTTGATCGCTATGCAAAACGGAGTTTAAAAACCGAGCTGAAGA GCAATCATCAATTTGATCGCTTCTTTGATGAGGGCTAAACCAATGGCTGAAAGATTGATGTGCAAAATTTCTCA AAAAGCGAAGAAATGAATGGCATTTTGTATGCGGATTTCAACCGCTTGAGCTTGAGCGCGGTTTAAAGGAGCGT TTGAAGATTTGATGTTGATGCTAGGCTAGGCTGATTTTGACAAATGAAGAGGATTTTATGAATTTTGAAGAAATGAACCA TTATGGCTATTACGAATTAGCAATAAATTACATTGAAACATGCATGAAGACTCTTTTATTACGATGAATTTTGGCTT CTCTTTTAGAAGACGCTCTCAATCCAATAAGGCTTAAAGAAATGAACCTTAAAAA	2202	KRALIKDGLAFKQAHYAEALRLFSEVL FLDKDNQKAKV GALLSDIAKDFPKEAH SFYEL YQSLIAMQKRSKLNQAEQIINLI ASFDEGLNQMAEKIDVQISQKSEELNG ILYADFKRLSLERGFKEAFEDLMFSSR VIFDNKEDFYEFLLKELNHYGYELAINYI ENMHEDSFYDEFLLRSLLEDALKSNKA
HP0108	2203	AAATAGGGATTTGTATTAGACGCGCATGCGGATATTCACAGGCTTATGACAGCGATTCAAAGCATATCCACGGC ATGCCCTTAGGCATGGTTTAAATCGTGCTCGTAGTGGTTAATCGCATGAGCGAGAGCGAAGAAAGCGCATGGCA AAAGCTTTGCTCTTTGGGTTAGAAAGGAGGTTAGAAATGATCTAAATGTTTGGTGATTTTGGGTAAGAAG CACCGAACAGAGCGAAAGAGATGTGATTAGGAAATGCAATCCCTTTATTAGCGTGATGCGATAAGAGAAACA TGCAAGAAAGTGTTCAAAACCAAGAAATCAATTAAGCGGTGGATATTATTTATCTCAGTTTGGATTGGACATTAT GGATGGCAAGCTTTTCACTTCTACCGGTGCGGTGAAATACCGGCTGAGTTTGTAGCTGAGCTCAAGCAATTACTGG GTTTGGCTTTAGAAAGTTTAAAGACCGATTAAAGCGGTTGAGTAACCGAATACAAACCCACGGTGAGTATAAAC ACAATAACGAAGAAAGACGAGTTTATAGATCTTATGATCTCATCAATAGCTGTAATAATTAAGATAAGAGC ACTCTTTTGCAAGGAGTTACTGATCGCTTTCAACCAACGATAAAGTTGAAAGTTGAAATGAAACTAGCA ACAAGAGGTGCTAAGAAAGATGAGAGTAAATGCTTTTGTATCAAGAAATTAAGACTAAATTTGTAATATACACAAA CATAAAAAGTAATAATCTAGGCAAGCGCTTTTGTAGATCAATTAAGCTTAGGCTAGATTATCAGCTTATGTTTGT TCTATAAGGGCGGTTTGTAGATGAAAGTTAAACCGCTTTAGCGTCAAGAGTGCTTGTGTGTTTGAAGAACGCA TATAGGCTCGTTGTGTCAAAATGGGATTTTCACTAGAGATTGAGTAAATCAGCA	2204	IGILYDAHADHTAYDSDSKHIGMPL GMVLNRVRSFNRMSSESEKAWQKL CSLGLEKGGLEIDPKCLVYFGVRSSEQ SERDVIRELQIPLFSVDARENMDEVWQ KTKESLKAVDIYLSLDLMDGKLTST GVRENNGLSFDELKQLLGLLESFKDR LKAVEVTEYNPTVSIKHNNNEEEKQVLEI LDLIINSCKIKDKKHSFARSY
HP0108	2205	AGACGATTTGAGCGCTCAATTTTGCAATCATACGCTTAAATCTAGCCACCGCTTGGCATCATCAAACTTCT AATTTCAATCAAAACATCACCATCACTTATAGCGATGAAAGAAAGAAAGCCTGAAAGCCCAAGCAAGAGGATAAC GATATTTAGAAACCTTTTGAACATTTGCGCGCTCAATTTCTTAAAGCGGCTTAAAGCGTTTGTATTTAGCGGT TAATTTGTTATTTAAAGAGATTATTAGAGAGTTTGTGTAATAAGGATTGCTAGGCTTTAGTCGTTAAAGGT AATTATCATTAAAGGAGTTTAAATCATGCGAGATATTCAAGCGCTGATTTTATGGAATGAGCTTGTAGTGTAC AGCTATAGGGGCTATAGCGAGTCTGGTAGCGATGAAAGAGCTTGGATCCGCTTCCAAGCGTTGTTTCAGCCGCT TTTACGACCATAGATGTGGCGAATATGCAAGAAAGGAGTTTCCACCGTGGAAATG	2206	DDLSAQFLQITLKILANQLGIKLSNFNQ NITTYSDEKKESLKAPSKDDNDILETLL KHLRAQISLKR
HP0909	2207	GGCAATCTAGTTGGCACAACACAGCTAGTCTGTGCTTATTAAAAACATAGGGCAATGAAACGCTCCCACTTAG AAATGCCCTAAATTATGCTTTAGAAATAGGAAACAGCTTACAAATGAATGTTTATAGATGGGATAAGCAATTCAT CTTAGAGAGTTGGCTCAATGACTTTGATTTGACTAAAGATTATACGAGACTATGCATTAGTTTCTATCAAAAGAT AAGCCAGATGAAGAGACAAATGCAAGGGCTTTTACATTTCTACTTGGGAGAGCTTAAATAAGATTGCCTGAATACAA GTTTGGCCCTTGTGCCACACGCTCATCAAGACCATGCCCATATCCATTGTTTATCAATAAGACTAATCAGCTCACAG AAGAGAGCTGCGTTTAAAGGGCATGAAGATTGTAAAGAAATTTTAA	2208	ANLVGKTASPVLKINIGQMKRSHLEN ALNYALENSETAYNEMFLECDKQFILE SWLNDFDLTKDYNETMHLVFSIKOKPD EETMQGLLHSTWESLKIRLPEYKFALV PHAHQDHAHHCIFINKTNQLTRRRRLF KGHEDCKEFF

HP0909	2209	TGCAGCTCCCCAACGCATTATGAAATCAAACTTAAAGGCATTGTGATGGGCGATGGTGATGCCAGACAAG TTTTAGCCATGAATACCGGTTTTGTGAATAAGAAATTAAGGCAATTCCTACTAAAGAGCCGGCTTTTGGAAATGGAC GCTTTATGGATTGAACTAAAAATAAGAAAGAGCCATTATTCAAGGCTATACCATATTGATCCAAAGCACCCTTATTG CGACGCACACCGCAATTAGTGAAAAATACGCTGAAGATTTATCACTAAAGATGAAGTGAATCCCTTTTAGAGC GCTTGCCCAAGATTATCCTACGATTGTAGAGAGAGTAAAAAATCCCAAGGTCGATCCGATCAGTCTTGCAA GCCTTTTACATGAAAAATCCCAATTAAAGACATGCTCACTATTTAGAAACGATTACCGATATGCCCCATTGGTTC AAACGATGTGAATATCTTAACCGAACAAAGTGAGGGCGAGGCTTTCTAGGGTGATCACTAACGCTTTTAAATCTGAA GACGGCGGTTTGAATTTTAACTTTTCTACCGATAGCGAACAATTTTCTAGGTGATCACTAACGCTTTTAAATCTGAA CTAAAGTTTGTGCTCAATGTGGCGAATTGCAAACTCAATTGAAGTGTCTCTGAAGAGGCCATGAAAGTCTTG CAAAAGGGATCGCTCCGGTATTGATCGTAGAGCTTAATTAAGAAAGCTCTTTCCAAATCAATGAGCAAGC CAGGATTGATGCTGCTAGCCATGCGGAATTAGATCCTAACTCTAATTTTGAAGCTTTAGGCACGATCCATAT TAACITTTAATGGATAAATAATTGATAAAAGGAGAAATGATCAAGTTTACCACCTTTACACATTTGATTAGACGGC TATGCTATGCCAGCTTGTTCAAACAATTTTTTAAATAATCAATGCTATAACGCTAATACGGCGGTGAAGTCTCAG CGAGAAATTA	2210	QLPPTHYEIKLKGIVGEGM/MPDKFLA MNTGFVNKEIEGIPTKEPAFGMDALWI ETKNKEEAIQGYTIDPSTVIATHTSELV KKYAEDEFITKDEVKSLERLAKDYPTIV EESKIPITGAIRSVLQALLHI:KIPKMDML TILETTIDAPLVQNDVNILTEQVRARLS RVITNAFKSEDGRLKFLTFTSTDEQFLL NKLRENGTSKSLLLNVGELQKLEVVSE EAMKVLQKGIAPVILIVEPNLRKALSNQ MEQARIDVIVLSHAELDPNSNFEALGTI HINF
HP0909	2211	CCAAAAGAAATTA AAAAGCGGATCAGCCCAACAAATCGCTATTTTAAAGATAAAAGTGCTTTTATTCTCAATGTTT CAGGCAATGTTTTTTTTTTTGAAGAGATCCTAAAGATTTAAAGCCATTAAAGAAAGGCTTAAAGAGACGATTGA GCCTAACCGTGACCCAAAGCGCTATCGCTTTTAAACCTCAAGCGAGCTTGATTTTAGAATCGCTCCGCAAA CCACTTGCCCGTTTGACACCCCTTTAATCCCAAGGCTTTTACGCTGCTTTTACGCTAATCGTTTGGCGGATA ACCCCTCTCTTTTCCCAAGAGGATAAAACCTATCATAACGCTTTGATCAAGCCCTTAATAAGGCTTACTATTCTCT TATGGAGGGTTTAGAAAAGCGTTTGAACGCTATAAAAAATGCAGAGTGCTTTAAGGCATGAAAAAGATTGCATTTT TATTTTGTGCTATTTGTTTTCGGT	2212	QKEFKAITQQIAYFLKDKS/AFILNVSG NVFFSFEENPKDLKAIKERLKTIEPNA DPKAVMRFLNQLASLILECVPQTTCPF DTLLIPTAFSVVYYANRLGDNPSLFSQ EDKTYHNALIKALNKAYYSLEMEGLEKR LNAIKNAEWL
HP0909	2213	TTCACTCCTTGAAATCAAAAAGCGCTAAAAAAGCGGATCAAGTGATCGCGCAAGTGAGCGGATGAGCGCTTTGAAA TCGCCAAACACCATAGTGCAGTCACTTTATTGAGAGCGCTTTAAGAGAAAGTTTAGGCTCGCATGTGAGTCAAGCG GGGAGTTTAGTGGAATCCAAGCGATTGCGCTTTGATTTCTCGCATGCTAAAGCGCTCAATGATGAAGAGCTAGAAA AGTAGAAGATTAGTCAAGCGCTCAATTTCAAGCACCTAATAGCCAGGTGAGCATATGCCCTTTAAACCAAGCCAA AGATAAGGGAGCGTTAGCGTTATTCAAGTGAATAACGCTGAAATGTGCGGGTGAAGTGTAAAGAGAGCGTCCCA TTGAATTGTGGGGCATTCATGTGGAATACTGGGCTATTGGGGGTTAGGATTGTAAGAGAGAGCGGGGT GAGTAGTGGGTGAGCGCATTTGAAGCGGTGTGCGGAAAGCGCTTTACCAACTGGCTAAAGAGAGAGAAATAAGAG CTTAAACGCGTAAGACTTTATTGAAAAATAACGATGTGATCGCGGATCAATAAGCTTAAAGAGAGCGTGAAAAAC AGCCAAAAGCCCGCTTTCTATGATTACCGGTTGAAAAATCCATGCGTGAATTTGGTGGCGGTAGTGGA ACAAGGCGACATTAAAGAAATGATTGACCGATTGAAAGTAAGCATGAAAGATTGCTCGCTATGGTGTAAAAAGA AAATGAGCGAATCACTCTCGCATGCGGGGTGAAAAACGCGCCCATATAAGCGGAATGTGTGGGCTAATGAAGTGGCG CAAATTTTAGG	2214	SLLEIKKALKGDQVIAQVSDERFEIAK HHSATHLLQSALREVLGSHVSOAGSLV ESKRLRFD FSHAKALNDEELEKVEDLV NAQIFKHLNSQVEHMP/LNQA/KDKGAL ALFSEKYAENVRVVSFKEASIELCGGIH VENTGLIGGFRIVKESGVSSGVRRIEAV CGKAFYQLAKEENKELKNAKTLKNNND VIAGINKLKESVKNSQKAPV:IMDLPVE KIHGVNLVGVVVEQGDIKEMIDRLKSK HERLLAMVFKENERITLACGVKNAPIK ANVWANEVAQIL
HP0909	2215	CGATCAAGCTTTTTTCCCGCCCATGACAAGTGAGCAAGAGAAAGAACTCATCGCAAAAGACGCCAAAGCGATGGTGAA AAGGCTAAAGTGGCTGTGAGGAATATCCGCCAAGATGCTAACACCCAGGTGAAAAAATTAGAAAAAGACAAAGAAAT CAGCGAAGATGAAAGCAAAAAGCCCAAGAGCAGATCCAAAAATCACCGATGAAGCCATTAAAAAATTGATGAAA GCGTGAAAAACAAGAGAGCGGATCTTAAGGCTAAACCATGGATATTAGGCATGTTATCAAAACGCTAAAGCG TTATTAGAGGGGCTTTCTGCTCAGCAGTGGGTTTCAATTTATTGCAATCCGCTAAAGTTTATAGAAAGATC CCAACTAGCCGAACAATTAGCGCTAGAAATTAGCCAAACAATCCAAAGAGCTCATTTGAATATTGAATCGGTGTCT CACCGGCTATTGGGGGATTTTGGCTGGGTATGAGCTTGCAAGGGCTTTGGCGGTGCGTTTATCTTCACCGGAAAG GGTGGATAATACCATGG	2216	IKLFFPMTSEQRKLIADAKAMGEKA KVAVRNIRQDANNQVKLEKDEKSEID ESKKAQEQIQKITDEAIKKIDESVKNKE DAILKV

HP0909	2217	TAGACTCGCTTTTACAGAAACGAAACAAATCCTAAACAAAGAAATATCCAATTAATCTTTCAAGCTTA CGCCCCCTTAATGGCTAAATCTGCTCGTATCAATCTAAGTTGTGAGCGCTTTTATCTTTATACGCAACTCAAAAA GAGCTTAAACCTCTAAGACACCTCTATAAATTGTACATCGCTAGAAACAAACGCGCATCTTTTATAGTCCCTA ATTTGAAACAAATAAACCAATTGTATCTGTGCGATTTGCGTTGCTTATAGCCTGACTCTAGCCCTTCGCTTT AAACGTTTTGAAACATGTTTTTTAGAGCTTTACAAGCAATCCCAAAATATGAGCTTACTCCCATGATAACGGG ATTTTATCTTGGCGGAAATCTACCAACAGCTCGCCCTCATCGCCACGCTTCCCGACGCCCATTTTATAGAA AAACAGCTTTATGGTGCCATAAACATGGTTTTTAACATTATAGTCTTCTATCAACGCCCTATTTAGCAACCA ATACCCCTACAAACACCTTAATTTTATGATTTTCTTTGGATATCAATCTATTTGGTATATAGTATGATGATTT ATGATTTATGATTTATGATTTATGATTTATGATTTATGATTTATGATTTATGATTTATGATTTATGATTTATGATTT TTATTTAATATTTTATTTTCTTAAGCTAACCCACTATAAGCTATCCAGTATTCGCTTTTGTGAGAAATGCTACCT ACCCTAAAGCGTAGGGTGTATTTAATGATTTTATAGAAAGGAAGCTACAATGAACGCTTGAAGAAATTAAGTTTC TGCGCCTTGTATCCCTAGGCCCTCTCGCTCAACAGCGCATGTAAAGCATTTAAAGGCGCAGGATTAACATCCTGA TTGGCTTGAATCAATTTTGGCGAAACAAACCGCCCAATCAATATGTCGGATCGGCTTCAATTTCTG	2218	DSLFTENEQEKILKKQENIQLIFQAYAP LMAKICSYQSKFVSFYLYTLQKKELKT SKDTLYKLLHALEKQIRILFLVPNFENNK TKLYLCDFALPYSLTPSPSLLNVFENM VFLEYKQFPKYELYSHDNGIFILRENS TNKLALIAHAFPTPHFLEKQLLWCHKH GFLNIIVSINAPISATNTPYKHLNIFDFS LDIQSILV
HP1312	2219	TCCGGGTAAGGCGAATTGAGTATCAATGAGCAGAGCTTGAATCAATGGTGGCGGACATGAAGCCATTAATAATGA AAGTCATGCGAGCCCTGCTTTTAAACCAACAGAGCAATCTGTGATATTAAAGCGGTGTTTTGGTGGGGCTAC TCAGCGCAAGCGGAAGCCTTAAGGCATGGCATTCTAAGGCTTGAACGCTTATGATATGCTTTTAGAGCCATTTA AAACCTAAAGGCTTCTCACTAGGATTCAGGGTGTGAACGCAAAATATGTTAAAGAAAGGCCAGAAAG CCACAAATCTCCAAAGGTAATCTCTATTCTTTTGCCTCTCCTTTGGGGGAGCTTTGGAGGCTTTGGCTCTCT TTATTTCTGCTTTTGTGCTCTCTGTTTATTAATAAT	2220	PGKELSINEQSLNQWLGGHEAIKMK VMQPLLLTKQEQSVDIKAVVFGGGYSA QAEALRHGISKALNAYDIAFRAILKPKG LLTRDSRVVERKKYGRKARRSPQFS KR
HP1312	2221	GAGATGGTGAACAACTTTAGAAATAATGAAGAAATAAGATGAAGCTTATTTGATGATGAATTTGAAGTTTT AGCCAATAAATTCATTTCTGTTTGGCCAAATATCCCTAGCACCTTAGAGATTGGTTAGGCAAGGCGGAGATCA TGAGATTGATGTGCTTTGGGAGTATTTTGTCTTACAGACACATTGGCTCTACAGACAAAGAAATACAGGATTG TAGGGCTTTATCGCAACGATGTTTTGTGCTCTCCACTAAATCTTAGTATCCAGCGCGAGACATTCTCTAGTGG CGGTAATCCGGAATTTGAATGCGGTGTATCTTCAAGTCAAAAGCAATGTGGGCGAGTCCAGCCCTTGGT AAGAGCATTTATTTATACATTGATATGCGTTTCAGAACAGAAAGCGATGATCGCGATGTGTATCAAGCCTTGT TTGCACAAACATTTAAAGAGCTACAGCTCTACATTGAGTTTACACCCCTAGCCCTAAGTTTACCATAAATTT TAGCGCTAGAAACCGAAAGCATGAAGTGAATTTGATTTTACAGGAAAGTTTATCCAAAACTCCATGAAGACC ACCAGAAATAATGGCCCTAATCGTGGTAGGCAGAGAGCTTTTATCTAAACACACCGAAAGGCTTGTATATAA CAGCCACCCAGTTTATAAACCAACACTTCTGGCTGTCTAAACCTCTCAAGCGGTGTTGAATGAATGAAGTT TGGATATTAATGAGGACATGCTTTCAGTGATTTTGTGATGCTATGCA	2222	DGEKTLENNEENKDEKLILIDEFVLAN KFISRLPNIPSTPREFGLGKGEIMEIDVP FGSIFAYRHIGSIRQKEYRIVGLYRNDV LLSTKSLVIQPRDILLVAGNPEILNAVY LQVKSINVGGQFPAPFGKSIYLYIDMRLQ NRKAMMRDVYQALFLHKLKSYKLYIQ VLHPTSPKFYHKFLALETESIEVNFDFY RKSFQKLHEDHQKMGMLIVVGRELFL SKHRIKALYKTATPVYKTNSTGLSKTS QSWVVLNESLDINEDMSSVIFDVSM
HP1312	2223	TTGTGAGATAAACCAACCATGACAACTAACGGACTTTAAGCAATACCAACAGACATGAAGAAATTAAGGATAGA AATAGATGAAGAGCTGGATACATAACGACTTATCCCTACTTATCCAAATTGTATCTTTAAAAAATACTCTAAAAAT TTAAAGATTACAAAGAAACAAAGCCGTAGGTGTTAAAGTCTAAACAAACAAACCAATTAAGGAGGTAATTTTA CAAAACCCAAAGAXATTAAACCAAGCCTTGACAAAGTCTAGTCATCAAAACAGACAGATACCATAAATCACAAG CGAACCTTCAAGCAATTTGAATTGATAGTAGTTGAAGATTGCAAGTAAACATGACTAAAGAGCTAAACTCAAA AATGTTAAACAAAGAGTGGCTTAATCAATCTATTTTAAACGCTTCACTA	2224	CEINNHDKLTDKQYQTDKMKELLGIEID EELDTKRLIPTYSKLYSLKKYSKKFKRL QRKQSRRC

HP1312	2225	GAATGGGTTGAGATTGTAGGGTTGGAGCATTTGGATAAAGTGATTTATTTAGATCAAGCCCCCATAGGCAAAACCC CACGAAGCAACCCTGCCACTTACACGGGAGTGATGAATCAGGATTTATTTGCCGAGCAAAAGAAAGCTAAA ATTTAGGCTATAGTGGAGCCGTTTATAGCTTTAATGTTAAAGGAGGGCGTGCAGAAATGCCAAGCGGATGGG ACATTAATAAGAAATGCACCTTTTGCCTGATGTGTTAGTCCAATGCATAGCTGTAAAGGGCGCTAAATACAAACCC AAACTTTAGAAATCAAGGTGAAGGCAAAATCCATTGCCGATGTGTTGAACATGAGCGTGGAAGAGGCTTATGAATTT TTGCTAAATCCCTAAATCGCGTGAAGTTAAACCGCTTATGGATGTGGCTTAGGCTATATCATTAGGCAAA ACGCTACGACTTAAAGTGGGGGAGGCTCAAGGATCAAAATAGCTAAAGAAATGAGTAAAGAACACACAGGCAAA ACCCCTTATATTTAGATGAGCCTACTACCGGTTTGCAATTTGAAGACGTGAATCATCTTTTACAAGTCTTGCAATCTT TAGTGGCGTTAGGCAATCTATGCTAGTGATTGAGCATAAT	2226	NGVEIVGLEHLDKVIYI.DQAPIGKTPRS NPATYTGVMDEIRILF/AEQKEAKILGYS ASRFSNVKGGRCCKCQGDGIKIEI HFLPDVLVQCDSCCKGAKYNPQTLEIKV KGKSIADVLNMSVEEA/VEFFAKFKPIAV KLTLMDDVGLGYITLGNATTLSSGGEA QRIKLAKELSKKDTGKTLYILDEPTTGL HFEDVNHLLQVLHSLVALGNSMLVIEH N
HP1312	2227	AGGGGGCGTGATTGAAAGTTGGGTATTGCTTTATGATGTGAGTTGGTTAAAGAAATGAACAGCATGTTTTAAG GGTGAGCCTTAAACCCCTAATGAGCGGTTAGTTTGGACATTTGCCAGCAAGTGAGCGAGATCATTTTCGCCCTTAT TAGATGTGTGCGATTATTTCAAGACGCTTATATTTGGAAAGTGAGTTCTATGGGTTAGAAAGAACGCTTAAACCC CCAAACACTTCAAGCTTCTTTAGGGCAAAAGTGGAGGTCAAACTCACCAATAAGAAAGCTTTCAAGCGCGTCTTA AAGACGCTAACGATTGAGCGGATTTGAATTAGAAGATCACGCTATCAAAAGCGTGAGTATAAAGATTTAAAGA AAGTTAAACGCTTTTGAATGGTGAATAATCGGAAGCGGTAGCGTTCTACACTTTATGAGAAATATCGCTTGAT TGAAATGGACTCTTATTTGGCTAAACCGCTAAACGCAATTTTATGATTTTACTGCTCCATTTGAGCGATGCT CATTTATTTCTTAACCAATTCACATCTTCTAGCGTCTTAAATCTTGAGTGATGGCTCTTTTGGCGATGGATTTT AAAAGCCTTCTCATGATTTTCCGCTCTGTTTAGGCAAACTGGCACATACATGACATTTGCTAAATTCGCGGATC TTTCCAATCTCAATGGATAAGATATGGTTCAATTTCTTTTAGCAATTTCTAACTCTCGCCAAGATTGCAATTTAGCCCCAT CGCACAGCACCAACGCAAAACGACCTCTC	2228	GGVIESLGYLLYDVS/VKENEQHVLRV SLKNPNGAVSLDICQCQVSEIISPLLDVC DFIQDAYILEVSSMGLF:RTLKTPKHFKL SLGEKVEVKLTNKEFQAVLKDANDLS ADFELEDHAIKSVEYKIDLKVKVKTLEW
HP1312	2229	CATGTCGGTGTGGACTCTAAAGACATTACCGCAAAAGCAGTGTCAAAGGCTTACTACTAAGCTTAAAGCAACAG CAGGGAGAAACAATAACGGGGCATCACCGCCCAAAAGAGAGAGGGGCTAAACACTCTATCGCATTTATGA TTTCAAGCGCAATAACAATATTGAAGGAAAGTGGCTGCGATTGATGATCTTACAGAAATCGCGCATCG CTCTTGATGCTATCCTGATGGGACAAACGCTATATTTACAGCCAAAGCGTTTGAAGTGGCGGATAGCGTTATC GCTGCTGAAGCGGTTTGGATATTAAAGTGGGCTTTGCGATGAAGTTAAACAAATATCCCATAGGAACGGTGGTGCA TAATATTGAAATGCATCCAGGGGCTGGCGGCAATTAGCCAGAGCGCAGGAATGAGCGCTCAAAATCATGGGTAGA GAAATAAATACACCATTTATAGGATGCCAAGCTCTGAATGCGCTACATCTAAGCGAATGTATGGCGAGTGTGG CGTGGTAGGGAATGAGGATTTTATCAATGTCTCTATCGGTAAAGCAGGGGCTAACCGCCACAGAGGGATCCGCCCA CAAACTCGTGGTAGCGGATGAACCCAGTGATCACCCGATGTTGGGGTGAGGGTAAACAGGGACAAAGCGGT CATCCTGTATCGCCTTGGGGCACTCCAGCTAAGGGCTATAAAACGAGAAAGAAAGCTAGCGACAAAGCTCATCAT TTCCAGAAAGAAACATA	2230	MSVLDKSDITAKSSVK/LLTLKLKATAG RNNNGRITSRHKERGAKKLYRIIDFKR NKYNIIEGKVAIEYDYP/RNARIALVYP DGDKRYILQPSGLKVGDVIAAEGGLDI KVGFAAMKLKNIPIGTV/HNIEMHPGAG GQLARSAGMSAQIMGRENKYTIIRMP SEMRYILSECMA SVGVVGNEDFINVSI GKAGRNHRGIRPQTRIGSAMNPVDH PHGGGEGKTGTSGHPVSPWVGTPAKG YKTRKKKASDKLIISRK/KH
HP1312	2231	GCAAAAAGACGCTTGCGGGTTTCATCTATGAGATCAGCGAGTTTCATGAAAGCCTATACCGCATTTGCTAAAAAACA GACCGATACGCTCTATTATTAGGATCTCCCTCTAGGTATTGGCCAGCATTTAACGACTGCCCTTTATGTCAAA TACCTGATTTTGACGCTTTGAAAAGCTTTTGGTGCTTATTATTACCAACTTGATTGACGAGGACGATCACG CGCATCAAGCAAAACGATCAACATTTCAAAACGTTAAAGCAATAAGAGCGTTGAAACCATCAAGAGCCTTATA TTGAATAGCATCGACTCTTATAACACCTTTGATCAATACCTCTATAAAGTATGGGATAGCTCTTCTGTTTATCATAGCA AATGGGTGCGTCTGTCTTAGCCCTAGCTAATTATTTCATGGCAGATGAAGAGAAACCCCATTTTATCGCTATGGATG CCGAAACCCAAAGTGAGCATATTTGCCACAAACGCCCAAGAGGCGAGTCAATGGAACGCGGATTTTGACAAAGA AAAAAGAGAAGAAATGGTAAATAATATCGCGAAATTTAACCTTTTAAAGCGTAAAAAGAACCGGATGCTTTAAACGG GGATTTTATGAAAAAGAAAAATTTATGGAGGCAAGACACGAGCAAGTATTAGCTGTTATGACATCACTAAAGA ATTGTATAGCAATTATAGGAAGTGGAAATGAGAAAGTCCCTCCAAGAGCGGATCAAAATCTTTGTATAACACTATCACGCGC TGTTTTACACATAGAGGGGCAAGAAAGATGATTTTGA	2232	KKDAGCFIYESEFMKAYTALLKKQDRY VYLLRYLPSRYWASILTALYVKYPDFD ALKKLLVSYYYQTWIAAGGTITRIKQTSIN IKNVKSNSKVETIKELI.NSIDSYNTFDQ YLYNLWDSSVYHSKVVVRPVLALANY FMADEEKPHFIAMDAETQVEHILPQTP KRGSQWNADFDKEKREEWVNNIANLT LLKRKKNNAHALNGDFDEKRIYGGKDT SKVISCYDITKELYSNYRKNWNEKSQ RYKSLYNTITPVLHIEG/QEDDF

HP1312	2233	TGATGAGATCGGAGCGGAGCGTTGAGCGCTTCACCAACCGCAAAAGCGTTTCAGAGAAAACGCGCAAAAAC GCAGAGTATCAACCATGAAGCGTCTTCGCACCATAAAGAGCATCGCCCTAACAAAACCAACCAACCAACCA CAACAAAACATGCCAAACACGAAATACGCCGAGAGAAATGGATAGCAACAAGTAGAGGCGTTACGGAAA TTTTGCATGTGAATGAGAGAGGAGCTTACGCTTCATAAGGAGTTAAAGGCGTTGAAGCGAATAACAAGATC CAAGTGGAGCATTTAAACCCGCTTATAGATGAATTAACCTAAAGCGAGCGTTAAATCACGCCCTTTAGGGGG CTTGGGTGAGATTGGGGGAACATGATGGTCATTGAACCCCAAAAGCGGATCGTGATTGATCGGGCATGAGC TCCCTAAAGAGGGGCTCTTGGCGTGATATTAAATCCCGGATTTTCTACTTGACCAAAATCAAGGACAAAATC GCTGGCATTATCATC	2234	DEMAGAFERFTNRKKRFRENAQKNA EYSNHEASSHHKKEHRPNKPNNHK QKHAKTRNYAQEELDSNKVEGVTEILH VNERGTLGFHKKELKKGVEANNKIQVEH LNPHYKMNLNSKASVKITPLGGLGEIG GNMMVIEPKSAVIDAGMSFPKEGLF GVDILIPDFSYLHQIKDKIAGIII
HP1312	2235	GCAAGAACAGATAATTTATAAACATTGAATGTGAATCGCTTTAGAAAGCGCTTGTTTATACGCCCAAGG CTATAAGATTAAATTTATAGAGCGTTTGAACGGCTTGAAGCGCTTTAGAGTGGGTATTTTAGAGAAAAG AACTACGCCAAAGTTTAAAGATTTCGCCTATTCCAAACGATTTACAAAATTTAGAGCTTGTTTTTCAATTACA GCGCGTTCCATCACAGCCAGTTAAACCGGCGAGAGTTGTTTATATGTAATTTAGAGCAAGCTCTTTTAAATC AAGCTTATATCATTAACACCGCTAAATCATTAACCAATTTGGTAAATTTCTTAAATTTTAAAGTTAAATCAT AAAAATACAGAAAATTTACAAAACATCTTTTAGAAAATTTAAAGGAGCGTTAAAGAGAAATATCGCGCA TTTATTGTTAGAAATCTTTTCCACGCGCATTTTGTCAAGGATTTTGAACGAATAAAATTTCTTACAAACAT TAAATGCATTAATAATACATGAATGCTTTTATATGAATAATTTAGAGCGCAAAATTTGCAATTTGGCGCTAAATC GCATGCCCAATAATAACGAGCGCTTGAAGCGTTTATCGCTTCTTACCCTTAACTCACACGCGATCAACAAAC GCCATTAAAGAAATCCAAACGATCTCACTAGCTCCATAGCGTGAAGCGTTTATATAGCGGATGTGGGTGCGG GAAACGATGGTATTTAGCGGAGCATGTTAATTAACCTACCAATAAAACCTTTTAAAGCGCCACTTCCATTCT CGCTAAACAGCTTTATAACGAAGCTTAAATTTTACCCCTTATTTGAAGTGAATTTGCTGCTCGCGGAGTTA CAAGAAGCGATCCAATCATTTGTTTGAACAATCACGCATGTGGTTATCGGCACGCAAGCGTTGTTTGATAAGC GC	2236	QETDNLKLTNVKSLEALLVYTPKGYK DLNLLERFETGLSGVLEVILEKRNAYAK VLKIFAYSKRFYKNLELVFFNYSAFHHS QFKTGESLFYKLEQSSFNQAYINTP KIITFGKISLIFKVKVKNHKKIQENLQKLI SLENLKKEGVKENIAHLLLEIFFPTPHFV KOFETNKNFSPQHLNALKYIEMLFYMK NLERKKLQFGAKIACPNNNERLKAFIAS LPFKLTRDQQAKEIQNDLTSSIAKCR LIIGDVCGKTMVILASMLVTPNKTLL MAPTSILAKQLYNEALKFLPPYFEVELL LGGSYKKRSNHLFETITHVVGITQALLF DKRDLNEFALVITDEQHRFGTKQRYQL EKMASSKGNKPHSLQFSATPIPTLAL AKSAFVKTTMIREIPYKEIETLVLHKRD FKIVMEKISEEIAKNHQVIVVPLVN
HP0954	2237	AAAAAGTCGCTCAGGTTTAGACTATAAGGGCGTGTGTGAAGACTTATCCAAACCAAGTGGCATGCAGCAAAAG CTTATGGATATTCCAAACAAAGGCTTTAAATGGGAATTAGAAATCCCTTTAGAGCAGGCGCATCAAGAAAGCTTAT GAGTATTATTGAAGCTTTTAGAGGTTTGAATAAATCAAGGCTCTTATGGAGCTATAAAACGCTCCGCTATTAAAG CGTTAGGCTAGTGGTAGTTGCGATATTGTGATCGTTTAGCTTCAAAACAACTTTGAGCCATTAAAGGGATTGGTG TGCGCTTCGCTCTC	2238	KVAQVLDYKGVFKDLSKPVGMQQL MDISKQRAKWELEIPLEQGIKEAYEY LKILEV
HP0954	2239	AAGGCTTTTATCCATGAATTAGAGCAGCCCTTAAACAGCGAACAAGCAAAATTTAGCCAAAGAGCTTCTCAATGAGCC TGTGGATAAAAGAAATTTTGAATCCCTATGTCAAGAAATCGCCGATCACACGCTAGGGGAATACACCAACGCC TGAAATTAGTGAATTTCTTATGTTATTAGCCTATGCTGATGGGATTTGGATAGCAAGAAAGAAATTTTGTAG TGTGGGGGTGTTTGCAGATAGACAAATCAAGATTTTAAACGAGCTTTATGACAAATTTGAACGCTTCAATGCAATAGA AATCCCTATGCTTTAGAAAGCAAAAGCTTTTGAATCCAACTCACACCAACCAAGCAAGATTTAGAAAAA GCCTTGGATTAAAGCGCTCCCTACTACCAATAATGAA	2240	TLFIHELEQPLNSEQNLAKELLNEPVD KKENFESLCQEIADHTHGEYTKRLKV EFLMLLAYADGILDSEKELFLDVGVFL QIDNDQFNELYDNFERFNAIEIPMSLEE AKSLFEIQTHHTTKQDLEKKALDLSAPYY HKM

HP0712	2241	GGATTTGCCCTTGCCCTTAGGGGCGATGGCGATCGGCGATCTATCCCTTGATCGCGGATTTGATTAAGG CTTTGATTAAAGCGGTTGAAGTCGGCTAAACATCAAAATTTGCTCTCTGGCATGCTGTAGAGCGCTCGCTCATTC GTGTCAATAAAGAGCGCTTACGAACCTTATTTAAGCCTGTATGCGAATGAACCTTCAACGCGCTTAAGCGGAGATTCAAA TTCTCGCCATAGACAAGCTTTTGAATTAGGCTATAGCATGGTTTATGCCAGTTTGTAAAGACTAAAGATTGCTT GCTCACTGATGAATATTTAAATACCGCTTTTCTTAATCCAATTTATGCTAAGCAAGTAAAGCATCATCCCA TACAATAAAGGATTTTAAAAATCCACCCCATAAAGATAGTATTTCTTGCAATCTTGTGTTGCAAGAA ATAATAAACCCCTCATTTAGTACTTAACCTAGAACTCATTAAAGGCGAGTAAAGCTAATTAACGCTAATCCAAACAACC CCCACGAGATGAATAACACCCCTAGTAAAAACGCGCTTTTGTATCCTAGCAGCTTAAACGCTCAAAACA AATAGAAATTTTATTAAACAGCCCTAAACAGCGGATACCTAGGTTTGTAGTGGTTTAAACACAAGTTTAA AAGCGGTGTGCAAGATAAACAGCAGCTGGATTGCGGTTAAAGAGATAAGCCAAACGACGCTCGCCACAAA CCAAAACAACTGAAGATAAAACACCATAGGGAGCAAGATTTAGGGAGCAATAAAGACTCCAAACTAACGGTA AAGAAAACCTTAAACCCCTTTTAG	2242	DLPLPLGGMAIRRSIPLYRAILIKKALIK VEVALKHQNLISGMLLERSLRVVKER LRTYLSLYANETSTRLEIQ'LAIDKLFE LGQHGIFYASLLKTKDCLL'DEYLYKR FS
HP0712	2243	TCGCTCTGGCTCAAAAAGAAAGACAACACTCTGCTTTTAAAGGCTGATGGCAAGTCTCAAGTGAGCGTGCGT TATGAAAACAACAGCCTGTAGCATTGATACGATTGTCAATTCACCCCAACATTCGCCAGAGTTTCAACAAAACAT TTAAAGAGCTGTGATTGAAGAGATCTGTATAAGTTTATCCAAAGATATTTGCATGACAAATATCAAGTTTTTG TCAATCCTACAGGAAATTCGTTATCGGTGGCCGCAAGCGGATGCGGCTTACGCGGAGCAAAATCATCGTGGA TACTTATGGGGGAGTTGCCGCTATGGCTAAATTTGGTAGCGAGTGGGTTTGGATAAGCGACCGTGAGCTTGT GGCTTATCGGCGCTATGTGGTAAATTTGGTAGCGAGTGGGTTTGGATAAGCGACCGTGAGCTTGT TATCGGATTGGGTGATAGAGCCAGTGTCTATTATGTGAACAGCGATAACACGAGCAAGTATTCAAGCGCTGAGTT GGAAAATGCGTGAAATCGGTTTCAAACTCACGCCAAAGGCAATATTGAAAGCTTGGATTATTAAAGACCCATT TTCGCTCACTTCACTTATGGCAATTTGGCGGCAATTTAGGGAATTCATTTGGGAAATTTTGTATAATCAACAATTCAC AGATTAAAGCGTTCTTAAAGCGTTAAATAATTTAAGGTAATTTTAAATAATTTTGTATAATCAACAATTCAC AAGGAGTTTAAATTGAACAAAGAACGCTGTCTATTATTAACCGGATGCACCTAAGAAAAGTGGTAGGCAAAATC ATTGATCGTTTGAAGAGTAACGGCTTGGAGTGGTGTCTATGAACGCTTGCATTTGAGCGTTAAAGACGCTGAAAA CTTTTATGCGATCCACAGAGAGACCCCTTTTAAAGATTATAGAAATTTATGTCAGTGGTCCGCTTGGTGTAT GGTTTATAGAGGCAAGGA	2244	ALAQKRKDNTPFLRPDGGK SQVSRY ENNKPVSIDTIVISTQHSPEV/SQKHLKE AVIEEIVYKVLKSKYLDHNIKFFVNPTGK FVIGPQGDAGLTGRKIIVDTYGGSCP HGGGAFSGKDPKVDKDRSAAYAAARYVA KNL VASGVCDKATVQLAYAGVIEPVS YVNTHTSKYSSAELEKCVKSVFKLTP KGIIESLDLLRPIYSLTSAYGHFGRELEE FTWEKTNKAEIEIKAFKR
HP0712	2245	TCATTGATGGGCAAAAAGAGCGCTCTATGGCGGATTGCGTGGCGAATTTGTCATAAAAATTCAGGGATCACG ATAGATATTGGAGGGGTAGCACCGAGTGGCGTTGATTGAAAAGGCAAGATTAGGACTTAATCTCGCTTGATGT TGGACGATTGCGCATTAAAGAAATGTTTATGACAAAGACTTAGAGGTCAATTTGGCTAAAGCCTTTATCCAAAAGA AGTCTCTAACTGCCCTTTAAACACAAAACGCCCTTGGGTGGGGGACGATCAGAGCGTTGAGTAAGGTATTG ATGAAACGCTTTTGTACCTATTGATCTTTGCTATGAAATAGATGCACATAAAAATTTAGCGTTCAATTGAAA AAATCGTCATGCTCAAGAAGATCAATTACGGCTTTTAGGGTGAATGAAGAGCGTTTGGATAGCATCAGGAGCGGG GCGTTGATTTATCAGTCGTTTGGAGCATTTAAACCTTCTTTAATGATCAGTGGGTGGGTGAGAGAGG CGTGTTTTGGAGGATTTATTGGCCATCATTAACCAATTAATCCCAATATCAACCCCTCTCTCATCTTTTAA GATCGCTTTTGGCCCATGAAAAGCACAGCCAAAGGTCAAAAAGATGCGTGAATTTGTTGAAGCCTTATCG CAAAAACGCGCTATAAATTGGATAATACCCCTATTGAAGAAATTCGCGATGTTATGCTTGCAAAACGCTATTCTAA AGCCTATTGACCATTTATTAGGGCTAAAGAACTCACTACGCTGTTGGCCAGCTTGACAAATTTGCAATTTTAT TTAGAGCTGGTGAAGAACGCCAGAACGCCATTTTAGAAAAGCGGTTTGTAGTTTAAAGAAATTTTGGAGAAA TACAACTCCGCTCTCATTGAATGATGAATGCAAAATCAAAAGCGTTTTTACCATCAATAAAGTTTCTTAA AAATAAGGCTTTAGTTTAAATTTTATTAACAAACAAACCCCTATCTTTGATAAATCTCAGGGTGGTCTTTAAAC GCCTATGGAACCAAAAATAACTTTCCGGGTGTTTCTAATCACCTCTTCGCACAACTCGCTTGGCTTGGCTGCAT TCTAAAATATCGTTTGGCGTTAT	2246	IDGQKEALYGGIACANLLH'NSGITDIG GGSTECALIEKGKIKDLISLVGTIRKE MFLDKDLEVKLAKAFIQKEVSKLPFKHK NAFGVGGTIRALSKVLMKRFYCYPIDSL HGYEIDAHKNLAFIEKIVMLIKEDQLRL GVNEERLDSIRSGALISLVLEHLKTS MITSGVGVREGVFLSDLLR-HYHKFPP NINPSLISLKDRLPHEKHSQVKKECV KLFEALS KNAPYKLDNTPIEENCACYACKRYSKA YLHLFRAKELTYARLASLI-NLHFYLEL VKNARNAILEKRFLSFKKEFLEKYNRS H
HP0712	2247			

HP0712	2249	TGGGTTTGGTGATAGGGGAGTTGCTATACCAATAATCTACCAATACGATGAGGGAAACTCTCTAAATTAAGGGCTTCTATTGTAGCGCGCATGGTTTACTAAATAGCGAAAGCGATCGCTTACAAGATTATTTGCGCGTTCTTCTCTG AAGAAATTTCTAACGGGAGAGAAACCCCTCTATTTATCAAGCGCTTTGAGGCTTTAATGGCTGGGTGATTTAG AAGCGGGTGTAGCTAAGGTGCAAAATCATGCAAAATTTACTCAATCGCGCTTACAAGCGTTTGATTTAGAGCAT TGTATTGACTATAAACCGCTTTACAGGAATTAACCCAAAGCGCAATTTGCGTGATCCCACTTACCAATTTGCTCA AAGAAAGGGGCCAGACCATCATAAAGAAATTTGAAATGGCTCTATACATTCAAGATAAAATGTATGCGACCGCTAAAG GCAAAAGCAAAAGAAAGCGGACAGCAATGCGCTTATCAAGCGCTTCAAAACTGAAGGAAGCCAAATGAACACTT TGGGCGCTTTTAAAGGCTCAGACTTTTGGGAATCGCATGGGATGTGATAGGGGGTATTAGACGGCATGCC TAGCGGGATTAAATAGACTATGCGCTATTAGAAATGAATGAAGCGCCCAAGGGGGAGGAACGTTTTTCATTA CGCCACGAAAGAACGATAAAGTGGAAATAACAAGCGGGTTTTGAAG	2250	GLVIGELLYHKFYQYDEGKLSKLASIV SAHGFTKLAJALQDYLRVSSSEISN GREKPSILSSAFEALMAGVYLEAGLAK VQKIMQNLNRAYKRLDLEHLFMDYKT ALQELTQAQFCVPIPTYQLLKEKGPDDH KEFEMALYIQDKMYATAKGSKKEAEQ QCAYQALQKLKEAK
HP0712	2251	AATCAGTTTGGAGAAATGCGTTTAAGGATAGCGGCTATTTAAAGAAATTAAGAGGCTAAAGATTGATTGA TGCGCTAAATTTGAGAAAGCCACGATTATAAATCGGCTGATGCTTTAGAGTATCAATACGATTTTTTTAAGGGT AAGGAATTACGCCCTTTAAAGCTATTAGATTAGCCAATGAGTTAAACCACTCTGTAAAGCAGCATTTCAAGGGCCATT TCTAATAAATTTGGCATGCGAAAGGGGGTTTCCCAATTAAGCATTTCTTAGCATCGCTTAGACAATAGCGAG ACTTCAAAAGCGGTGATTAAAGACTATGTTTAGAATTGATCAAAACGAAGCAAAAGAGCCTTTGAGCGACGCT AAGATTTAGAACTCATTTGAAGAAATTTCCATTTGAAATGTAAGAAAGCAATCAACCAATACCGCCAACTGCTC AACATCGCCCTCTCAAGCGAAAGAAAGGCTCTATTGATGCGGCTTGAAGCACTTTGCGAGTTGGTATAGGCTTATTCTTA TTGAGTATCATTTGCTTGTATGCGTGTAGTTCAAACTCTGGGATACCTTTGCGAGTTGGTATAGCTTTCTGTA TTGCACGTGTCTAAAGCCTTAATGTAGCCTCTTTTGTCTTGGTGATCAAAATGGTATTAAGTTTGTCTTAAAA CGCTATAAAGATTAGCATTTGCGCCACCTACCATCGCTAAAGGGTGTATCCTTTCAACAAATGTGTT GTTCTAAATAGCTTTTAAATTTTCTTATCTGTAAAGGTTTCTAT	2252	ISLEENRFKDSGYLKEKLKEAKDLIDAL NLRKATYKIGLMLLEYQYDFKKGELR PLKLLDLANEFNHHSVSTISRAISNKYLA CERGVFPIKHFFSIALDNSETSNVAKD YLLELKNEKKEPLSDAKILEIEEKFFH LKMVRRRTITKYRQLLNIASSSERKRLYL MRA
HP0712	2253	TACACCGCTCTATTACACACTTAGGGTTGCAACGCTATTTGATTTGGTGCAAAATTAGGGGCTTTGAAGCG CTCTATAGAGAGACTAAAGAAAGCGCTTTGGCCACTCAAAAGCGCTTTAGCTTTAGGTTTAAAGATTTCCTTAAA AGCCCAAGCTTGAGCATGACAACGATTGTAATGAGCATGCCAAAGATTGAGAAACCTTTTAAAGAAATATACCA GGTGCAATTTGCGGGCGTCAAGAGCCTTATAAGATGCGCTCATTTGATCAACCAATGGGATCATCTCTGTTTA TAAAGCGCTTACGCTTTAAAGCCTTAGAGTTAGCCCTAAACGACTTGATTAAAGGAAATTTGATGGCGTGCGCA ACGCAACTTTTAAAGCAATATTATGGAATTAAGGATCACAATGCATTATCTTATGAAACCTTTTAAAGACAGCT TGGAAATTAGTCAACAAAGTAGCAAAATTTGCGGTGTCCAGAACCCCTTGTGCGGTGATCGAGGGGCGCATGAC TTTAGCGCATTTTGTGAGTTTGCACTGGAATTAAGGGAAGTTTATGGCATCAATGCGATTCTTATGACACCCCAA GCAACAAAGCGCCTAAATAATGAAATATCCCAAGCATCAAGAGCGCT	2254	YTAPILHTLGLQRYFELVQNLGGFEALY RETKKAALATQKAVLALGLKIFPKPSL SMTTIVNEHAKELRNLLKEKYQVQFAG GDEPYKDALIRINHMGIIPVYKSAYALN ALELALNDLIDREFDGVANATFLKQYY GI
HP0712	2255	TGCGTTTGACACTGCGCTTTTGGTATTATTCATGCTTGTGCTCTCTTTGATAAGCGGTGCGAGTCTCTTTAA AAGCGTAACTAACGCCAGCTAATCCCGCTTCAAGCTAATGGCTTGAAGCCCGCTTATCCCAACCAAT TCAACCCCTAGAAAGAGCATTCAGCCTCTCCCAAGCCCTCGCTTGAATAACGATCAGCCCGCTATTAGTTCTAAC CCCACTAACGCTATCCCTAACACCCCGCTTCTACGCTTAAATGTCATTGAATTGAAGCGCATGGCGTG GCTCCAGAAATCCACCATTTCAACCTCTCAAGCCTGCTAGCCAAAGCGGCGCTATCGTTGATGGCTACCGCC AGTTGGGTGAAATAATGTATGTTAGTGAAGTGAAGCTCAAGACACCGTCAAGACATGGTTTACAAATTCGGTGA TTAACCGAGAGTCAACGCTCTCATTCGTAAAGCTGAAATCACTGAGACCATCTATAAAGACGCGCTTGTCAAGTG AGCATGGAGCTTAAATTAGACGGCAGGATTGGTATCGTATT	2256	RLHTAFFGINSLLVASLLISGCSLFKKR NTNALIPPSANGLQAPIYPTNFTPRK SIQPLSPRLNNDQPVISSNPTNAIPN TPILTPNNVIELNAWAWAWLQNPFFHP LKPWL
HP0712	2257	TTTAAAGGCTGACAACGCCAAACAGAACCGCAATCAAAACACAAAGGGCTTATATCATGGAAACCAACCCAA ACAATAACCAAGCGTCATTAGAACGCAACGGAATTCACACACACCATTTGGAAAGTGGCTAACGAATTGAGAGGCTCA GTGGATGGCTGGGATTTAAGCAATACGTTTAGGCTTCTTTTACCGCTACATTCAGAAACATGACTCATACATCA TCAATAAAGAGAGCGAAAGCGCGATCCGAGTTTGTATACGCTAAATTAAGCGATGAAAG	2258	LKADNAKQNRQSKHKKGAYIMENPN NQASLERNELHNTWVKVANELRGSV DGWDFKQYVLGILFYRISENMTHYIN KEERKRDPSPFDYAKLSDEK

HP0712	2259	GATTAATGCGCCATTAGCTCAAACTAACGCTCTGAAATTAGGACATAGCTTAGAAAATGAGATCGCTCTTTATTTCATT CATGGGGTGTGCAATTTGTTGGCTATGACCATGAAAAAGATAAGGCGGAACACGCGCAACGCGCAACGAGAGCGCACTCA TTAAAGCGTTTAACTTGCCTTTGAGTTTGAATGACGACACAGGATTAGGTTAGATCTACTACTAATGCTGACAAAT AAAGCTTTTAAATTTTAAAGATGGAAATTTTAAAGATTTGAAAAATGCTTTTGGAAATTTTCAAAGCCCTTCATAATAAT ACGACTGCGTGATGCTTTAATGAGAGTTAAGGGATCGTTGGTATTAGAACTCAAAATGCTTTTAAAGCGGTTTGA TTTCCAAATCATTCACAGGACTCTTTCCATTGCGCTCAAAATAGCGGCTTTATCAATCCTATCCCAAGCAGCATTTT TTTCAATTCCTTCTTAAGCAACAAATCAAGCCATATCCTAGCTCTGCCATTACCTCCCAAAAGGCTGAGCGAT ATTCAATCCACATATTTTCTACGATTGATTGAAATTTTGGCGCATGCTCTCAATCTGGGTAAATCAATCAATCCA AATACAAGCAGTTAGCGAACCTGAAATTCCTTTAGCAA	2260	INAPLAQTNALKLGHSLENEIALFIHGV LHLLGYDHEKDKGEQRQKESLIKAFN LPLSLIERTQD
HP0712	2261	CGCCCCCTATTAGACAACACGCCCGCTTAGACAACACCCCTAAATAATCATGATGATCGTTTTGGAAAGCGCGG CACCTTTGAGCGGCTTTTAGAAAACTAGAAAAAATAACGCAAGGTTTTGCGCGTTTGGTCTGGATAAGAAA AAAAAGTTCTGGCCCTAGCGTTTTATATGAAGATCAAGGCTATTTTACCTTTAGAAAGGCGGTTATTTGCGCCCTT TTCTTTAGAGTTTTGCAAAACGCTTTTTTAAATGTTACAGCATGCGCAATCATTTGGCATGATTTAAACCCCTTG TTGAGCTTTTAAAGCCAAATACAGGTTGCTTTAGAAAAACATTCGCATCCAGACACTCAAATTTTAGCGTTTTAA AAAATCCGGAAGAGTGGGTTTATGAAGTTTTAAAGGAATTTTAAAGAAATGATTCCGCATGAAAAAATCA AAGATTTTAAGACTAAAGCGGAGAAATGGAACCTTTTAAAGCGTGAATTAACGCTTTTAAAGCGTTTGTGAATATTT TGAAAGGGGGGATTGGAAGAAACCTTGCTTTCTTTGGCCAGAGAAATTAAGCGCTTTTAAAGCGTTTGTGAATATTT GCATGGAGTTTCAAGGCTTTAAGATTGATGCGCTTATTCAAGCGCTTAGAGCAGGAGTTTAAAGATGAATGCAATG TTTTAGAGCGCCAAATTTTGGAACTAATTGGCGTGATTTTAACTCAATTCGCCCAAGCACTTAGCGAAGCTCTGT ATGATAAATTAGGCTTCTTAAACAAACAAAGCCATTCTACCGATGAAAAAGCCTGTTAAATACTTAGACAAGCATC CAAGCATGCTTTGATTTTAGAATACAGAGAAATGAACAAGCTTTTAAACATTATACCAACCCCTTATTGCGCCTAAA AGACAAAGACGATAAAATCCATACCACTTTTATCCAAACCGGCACAGCTACCGGGCGTTTAAAGCTCGCATTCGCCTA ATTGCAA	2262	APLLDNTPALDNTPKKSCMIVLESAAPL SAFLEKLEKTNARVAFARLVLDKEKKVL ALAFYEDQGYFLPLEEALFSPFSLEFL QNAFFKMLQHAQIIGHDLKPLLSFLKAK YQVPLENIRIQDTQILAFKLNPEKVGFD EVLKEYLKEELIPHEKIDFKTKAEKLEL LSVELNALKRLCEYFEKGGLEENLLSL AREIETPFMKVLMGMEFQGGFKIDAPYF KRLEQEFKNELHVLERQILELIGVDFNL NSPKQLSEVLYDKLGLPKNKSHSTDEK SLLKILDKHPSIALILEYRELNKLFTYTT PLLRLKDDDKIHHTFIQTGTATGRLSS HSPNLQNPVRSPKGLLIRKGFIASSKE YCLLDVDSQIELRLLAHFSQDKDL
HP0712	2263	TAACCCCATTAATGGATTTGCCAGCCAAACAAACCGGGCGTGCAAAAAGCCCAACAGATCATCAAGGCA TACAAACATCCAGCAAAATATCCCTCTCAAGTATTAAACCCCTCAATCCAAAGCGGCATGCAAGGGGTGATGCAA GGTTTGGGCTTTGAGCAGCACTTTAGAAAGCCCTTTATTGTTTCTAAGCAAAATGTGGTATTGGGCTTTGAG CATTATTATCCCTTTATATGGTGGGCAAGATTACGATGGTGGCATTCGGATTGATGCAAAAAGATGCTAA TGAAGTGATCGTTTGAAGAAAGCTTTCCACTTTCAAGAGCTTGTAGCGTGATTACGGCATGGTGTAAACGCGAGA AGTGCTGAACCTTTAGAGAGGTTGAAAAAGGCCATTATAAGCATTCCAAACGCTTTGAAATGCAAAAAGTGG GGCAATCGCTAGGTAGAAACCTTAGCGGCTCAAGTGGCTTATGATAAGGCCCATATCGCTAGCTTAAGGCTAAA GACGTGTAGAGTTTGCAGCTCTCGTTCAATTCATTATCTAGCAAGGACGATTAGTGCCTTCAAGCAAAATTA GAGATCCGACGGAGAAATCTGCCGATCTGAGCTTTTGTCTTCCAGCTCAATTCCTACCGGTTTAAAG ACTTTAGAAATCAGATTCAATCTTAAGAAAAACAGAAATTACAGATCGCTAAATCTTGCCCAAGTGAGTTTTT TTGGCTCTTATATTAGAGCAAAACAAATTCGGTGTGTTGAAGACATGATCCCTAGTTGTTGTTGGCGTGGCCGGG CGCATGCTTATCTTCTCCACAGGGCGCATTCAAAAATACCAAGCGAGCAAAATTAGCGGAGTTGCAAGTGAGTAG CGAACAAATCCAGGCTAAAAAAACATGGAATATTAGTGAATAAGACTTATAAGAGACGCTTCTTATTGAAAGAA TACAAAAGCTTGCTT	2264	NPIKMDFAQKQKPGVQKATNQHQQIQ NIQNIQPSQVLTPQIQAGMGVMMQGF GALSSTLEAPLLFSKQNVVIGALSIIYPL YMGGARFTMVRADLMQKDANEVYRL KKLSTFQELVSYYGMVNLNAEVAETLE EVEKGYKHFNALKMOKYQGJARVE TLGAQVAYDKAHIASVKACVLEVSQ SFNSILSSKDDLVPSKKLEIRTEKNLPD LSFFVSSSTLNSYPVLKTLENQIQISKEN TKLQIAKFLPQVSFFGSYMKQNNVSFVE DMIPSWFVGVAGRMPILSPITGRIQKYQ ASKLAELQVSSEIQAKKNMIELLVNKT YKETLSYLKEYKSLSSVELAKENLKLO EQAFLOGLSTNAQVIDARNITLSSIVWE QKSVAYKYIVSLANLMALEDHIDLFYEF VY

HP0712	2265	AAGAACGGGTTGAAGCGTTAAACACCCCTTTATAGAGTTTAAAGGGTGGTAAATCAGGCTCACCTTGCCTTT TTTGACGCTAAAGCATGGATAAATCATCAAGAGACATTACATCCATCGCTTATTGAACCAAACTAAAGACGCAT TATTGCAAAAGCCCTCAAACTCTAGCTCTTTTAAAGCCTTTAGAAATGATGAGCATAGCCTCTAGCTTTCTAA AATAGGGAATTTGTTGGTAGGAATTAGAACTCTTTGCGTGAAATCCAGCCCAAAACACCCGCTTAAATAG TGAGAAACTTTTAAAGCTTTTCAAAAGGCGTTATCGCAAGGATTTATGCGAATTCGTGCTTTGAAGCTTT AGCTTGAATGAAAGATTTTGAAGAAATCGCTCTGTTTGAAGAAATCTTAATAAGCTTAAATTCGCTATAA TAAATTTCTTTAAACGGCCATATCCCAAAACGCTAGAGAAATGATAGAAACGACAGAAATCAATTTAAAG GAACCTAAGAAATGGAAGAAATCAGCGATCTTATAGAAATGCATTCGCTATGAAAAAATTTGCCTAAAGAGATGATTC AAAGTGATTCAGGCTGT	2266	ERVEALKNHPL YRVL RVGKITLTLFCS LKAWINHQEDITHALLNQTKDALLQKA LKLYALLKPLELNVSIASSFSKIGNLFGR ELESFCVKIQPKNTRALNSEKLYLKLFO KGVIAISCEFCVCFEVSLSNEKDFEKIAL VLEEILNKA
HP0100	2267	ACGATTTCAAGACTTCTTCAAAATCAGGAGGATTGGCTAAATGAAGCGAAATGAAGAGTTTGCAGAGT TGAAACTCGCTATCACTAAAGAGACTTTAACAGAGAGCAAGCTTTGAGCGTTTAAAGGCGATGAATTAAGCAT GCGGTGATGAGTAAATCGGTGGCGATGCTTTGGCGTGTATCAACAAAGCGAGTTTGAAGATTTGTGTAAGGGC CGCATCTCCAAACACCCGTTTTTAAACCATTTTAAAGCTCACTAACTGGCTGGGCTTATTTGGCGGCGATGAA AACAAATGAATGCTCATTAGAAATCTATGAAATCGCTTTGCCACCAAGAGGTTTAAAGACTATCTTTTCCAAATAG AAGAGCGAAACGAGATCAGAGAAAGCTAGCGGTGAGCTAGGCTTTTATGCTTTGATGATGAGATGAGGCG GGCTTACCTTTATGCTGCTTAAAGGGCAAGCTTAGGAAGCGCTTGAAGATTTTATGAGTCAAGCGTTACTTT TAAGAGGCTATGAGCGGTTAAAGGCTCTGAGATTTAAAGAGCGATGTGTGAAATCAGCGGCGATTTATGACAA TATAAGAAACATGATTTTCAACACGATGATGAGCAAGATATGCAATAAGCTATGAAGCTGCGTGGGCGATAT AAAGTCTATCAAGCGCTTTGCACAGCTACAGAGATTTGCCCTTAAAGTTTATGAATACGGCTGTCATCGGCA TGAAAAAGCGGCTGTTGCTGCTTTTAAAGGTTAGGAAATTTACCAAGATGATGACATATTTTGTCTCTT TGAACAGATCCAAAGCGAAGTGAAGCGGATTTAGATTTTACGCAAAATCATGCAAGCGTTGATTTAGCTATGA AATGGAATATCCAAAGCGGCTAAATCCATAGCGGATGATAAAGTTGGGAAAGGCCCACTAACGCTTTAAAG AAGCCTTAAAGAACACCG	2268	DFKTSKISEEDLPKIEAKMKEFAKLKL AITKETLTREQALERFKGDELKHAVMS KIGDAFGVYQQGEFEDLCKGPHLPN TRFLNHFKLTKLAGAYLGGDENNELI RIYGIAFATKEGLKDYLFQIEEAKKRDH RKLGVELGLFSDFDEIGAGLPLWLPKG ARLRKRIEDLLSQALLRGYEPVKGPEI LKSDVWKISGHYDNYKENMYFTTIDEQ EYGIKPMNCVGHKIVYQSALHSYRDL LRFYEGVVRHREKSGVLHGLLRVRE FTQDDAHIFCSFEIQSEVSAILDFTHKI MQAFDFS YEMELSTRPAKSIGDDKWV EKATNALKEALKEHRIDYKIDEGGAF YGPKIDIKITDALKRKWQCGTIQVDMNL PERFKLAFTNEYNHAEQPMIHRAILG SFERFIALSEHFGGNFPFFVAPTQIALI PINEEHVFAKLKLEALKKRDFVEVLD KNDSLNNKVRLEAK
HP0100	2269	TGAAAAAGAAATTAGACAACTTGTCTGAAGAGGATGGGAATGAAAGTATTGCCTATGATTTTCAAGCGCTAAGGAGTT GCTAGAATTGTGCCAAAAACACCAAAAGCATCGCTGAAATCGTGCCTTTGAGAGAAACGCCCTGAAAAACCAAC CTGATGCAACGATGTTAAATTTATCATGCGATGCTTGAAGTATTGATGATGGGCTAATTTCTAAAGAAAGGATC TGCTGCTTCTTTGAAGTAACACGATTTGCCCAAGCATTAACGCGCTAGAAACACCCCAAGCGGGA GACCCCTTAGCTTGAATGATTAATTTGCTTTACGCTGCGGCTTGTGAAGAAACGCTAGCGGAGGCAAGGT GGTAAACCGCCCACTAATGGGCGCTGCGGCTGCTTATACGCTAAA CGCTCTATGGCGGATTGCGTGGCGAATTTGTGCTATAAAATTCAGGATCAGATAGATTTGGAGGGGTAG CACCGAGTGGCGGTTGATTGAAAAAGGCAAGATTAAAGGACTTAATCTCGCTTGTGTTGGACGATTCGCTAAAG AAATGTTTTTAGACAAAGACTTAGAGTCAAAATGGCTAAAGCCTTTATCCAAAGAAAGTCTCTAACTGCCCTTAA ACACAAACGCTTTGGGTGGGGGACGATCAGAGCGTTGAGTAAGTATTGATGAAACGCTTTTGTACCCCT ATTGATCTTTGCTGCTATGAAATAGATGACATAAAATTTAGCTTATTGAAATAATCGTCATGCTCAAGAAAG ATCAATTACGGCTTTAGGGGTGATGAAGAGCGTTTGGATAGCATCAGAGCGGCGGCTTATTCAGTCTGTT TTGGAGCATTTAAACATCTTTAATGATCACTAGTGGGTGGGTGAGAGAGGCTTTTGAAGGATTTAT GCGCATCATACCATAAATCCCCCAATATCAACCCCTCTCTCATCTTTTAAAGATCGCTTTTGGCCCATGA AAAGCACAGCCAAAGGTCAAAAGAAATGCGTGAATTTTGAAGCCTTATCGCTTTCATATAAATAGATGAAA ATACCTTTTCCATTTAAAGATTGCGGGGAATTAGCGAGCATGGTAAAGATTTAAGCGCTATTAGCCCCACAAGCA CAGCGC	2270	EKELDNLSEEDGNESIAFYDFSSAKELL ELCQKHQKSI AEIVRLRENALKNHPDA TMVKIYHAMELECYDNGANSKERYLP SLKVTRLAPSIKTRLEKHPTSGKDPLAL IDYISLYARAIAEENASGGKVVTAPTNG ACAVPSVLLYAK LYGGIACANLLHKNSGITIDIGGGSTEC ALIEKGKIKDLISLDVGTIRIKEMFLDKDL EVKLAKAFIQKEVSKLPFKHKNAGFVG GTIRALSKVLMKRCFCYPIDSLHGYEIDA HKNLAFIEKIVMLKEDQLRLGNEERL DSIRSGALISWLEHLKTSMLTSGVG VREGVFLSLLRHYYHKKFPNINPSLIS LKDRFLPHEKHSQVKKECVKLFALS PLHKIDEKYLFLHKLKAGELASMGKILSVY LAHKHS
HP0100	2271	CGCTCTATGGCGGATTGCGTGGCGAATTTGTGCTATAAAATTCAGGATCAGATAGATTTGGAGGGGTAG CACCGAGTGGCGGTTGATTGAAAAAGGCAAGATTAAAGGACTTAATCTCGCTTGTGTTGGACGATTCGCTAAAG AAATGTTTTTAGACAAAGACTTAGAGTCAAAATGGCTAAAGCCTTTATCCAAAGAAAGTCTCTAACTGCCCTTAA ACACAAACGCTTTGGGTGGGGGACGATCAGAGCGTTGAGTAAGTATTGATGAAACGCTTTTGTACCCCT ATTGATCTTTGCTGCTATGAAATAGATGACATAAAATTTAGCTTATTGAAATAATCGTCATGCTCAAGAAAG ATCAATTACGGCTTTAGGGGTGATGAAGAGCGTTTGGATAGCATCAGAGCGGCGGCTTATTCAGTCTGTT TTGGAGCATTTAAACATCTTTAATGATCACTAGTGGGTGGGTGAGAGAGGCTTTTGAAGGATTTAT GCGCATCATACCATAAATCCCCCAATATCAACCCCTCTCTCATCTTTTAAAGATCGCTTTTGGCCCATGA AAAGCACAGCCAAAGGTCAAAAGAAATGCGTGAATTTTGAAGCCTTATCGCTTTCATATAAATAGATGAAA ATACCTTTTCCATTTAAAGATTGCGGGGAATTAGCGAGCATGGTAAAGATTTAAGCGCTATTAGCCCCACAAGCA CAGCGC	2272	LYGGIACANLLHKNSGITIDIGGGSTEC ALIEKGKIKDLISLDVGTIRIKEMFLDKDL EVKLAKAFIQKEVSKLPFKHKNAGFVG GTIRALSKVLMKRCFCYPIDSLHGYEIDA HKNLAFIEKIVMLKEDQLRLGNEERL DSIRSGALISWLEHLKTSMLTSGVG VREGVFLSLLRHYYHKKFPNINPSLIS LKDRFLPHEKHSQVKKECVKLFALS PLHKIDEKYLFLHKLKAGELASMGKILSVY LAHKHS

HP0100	2273	AATACCTTGTCATCAAGAAAGCGGTGTGAAATGGGTTTAAACGCGCTAAACCTACCCAAAGCCCAACAATCAA AGAGCTGCTTTTAAACATTACCCCAACCAACCCGAATTCGCCATATAAACCCCTATGAATTTTGGTGGCGAC CATTTAAGCGCTCAATGCACGACGTAGAGTGAATCAATCAATACGCCCAAGTTATTTGAAATAATACCCGAGCGTGA ACGATTTAGCCCTCGCTCTTTAGAAAGATTAAAGAGATCATTAATCCGTTCTTATTTAACAATAAAGCAAGCA TTTAATCAGTATGGCGCAAAAGTGGTTAGGATTTAAGGCGTTATCCCTCTACGCCAAAGAAATGATGAGTTT AGATGGCGTGGGCAAAAACCGCTAATGTGGTCTTCAGTGTCTTTGATGCAATTTGATAGCGGTAGATACCC ATGTGTTCCGTGCAACACACCGCTTAGGCTTAAGCAATGCTAAAGATCCCATTAACCCGAAGAAGAACTCAGCGAT CTGTTAAAGACAACCTGTCCAAACTCCACCATGCTTAATCTGTTTGGCGCTACACCTGCAAGGCTAAAAACCCC TTAIGCGGCGCGTGTTTTAAAGGAATTTGCGTTCT	2274	IPCHQRKRVKMGLKRAKTHQKAQKQIKE LLKHYPNQTTTEL RHKNIPYELLVATILS AQCTDARVNQITPKLFEKYPSVNDLAL ASLEEVKEIKSVSYFNKSKHLISMAQ KVVRDFKGVIPSTQKELMSLDGVGQKT ANVLSVCFDANCIAVDTHVFRATHRL GLSNAKDPIKTEEEELSDLFKDNL SKLHH ALILFGRYTCKAKNPLCGACFLKEFCV S
HP0100	2275	AAGCGGTTGGCATACTATTCTAAACCTTTAAACGCTGCCCTATAAGGAAGCGGATGGAATAACGGAGCGGAC AAGCGGATTTACGCTTTGAATTCCTTTAATAGAAGTGGGATGTTTTAGGACAGCTCAAAACGCTATTTTCT AATACGCAAAAGATCTAAACCAACCGCATCAAGCTTTAAACGTTAAGGGGCTGATGCGCTTTTAGCGCGCAG CGTTTAAAGAAATTAGAAGAAATTTGTCGCCCAATTTGGGCTAAAGGCTTAGCGTATTTGCAAAATTAAGAAGATGA AATTAAGGACCTTTAGTTAAATTTTAAAGCGAAAGGGCTTAAGAAATATTTAGAAAGGACTGATGCGCAAGTTGG GGATAATTGCTTTTTGGAGCGGGGATAAAAAATCGTGTAGATTACATGCGGCTTTCGCTTGAAGGTGGCTG AAACGCTTGATCTGATTGATAAGACGCTTTGAATTTCTTATGGTAGTCAATTTCCCATGTTTGA AAAACCCGAAAA CGGCTATCATGCCGCGCACCCCTTTTACGATGCCCTAAAAATATAGATGCGAAGATATAGAAGAGGTTGAAGCGC ATGCGTATGATGTGCTTAATGGCGTGAGCTTGTGGGGAGCATAGGATTATATAAGAAAGAAATGCAAAA AAAAGCTTTGAAAAATCAATATCCATGAAGAAGACGCAAAAAAATTTGGCTTTTATTAGAAGCGCTAAAATTT GGCGCTCCTCATGGAGGCTTTCGATAGGATTTGATCGCTTATGATCAATGCTAAATCTCATAGCATTAGA GACGTGATCGCTTCCCTAAACCGCAAAAGCTTCATGCTTATTGACGAACGCGCTAGCCCCATTATGAAGAGCA ACTAAGAGAAATTACAATTGCTTGAGAAATAATTTAAAGGAT	2276	AVGHTISKPFKRMYPKE:AMENYGS DK PDLRFELPLIEVGDCFRDSSNAIFSNTA KDPKNKRIKALNVKGADIALFSRSVLKE LEEFVRQFGAKGLAYLQIKEDEIKGPLV KFLSEKGLKNILERTDAQVGDIVFFGAG DKKIVDYMGRRLRKVAETLIDLKDAL NFLWVNFMFEKTENGYHAAHHPFT MPKNIECEDIEVEAHAYDVWLVNGVEL GGGSIKRIHEEMQKKVfEKINIHEEEAQ KKFGFLLEALKFGAPPFHGGFAIGFDRLI MLMTKSHSIRDVIAFPKTKQASCLLTNA PSPINEEQRLHRLRIK
HP0100	2277	CTTTGCAGCTTGATGATAACAGAGGGTTAATTCACCTCGCACACTTTGGATATGCGCATGGATTAGAAAGCGG AATTGAACGCTCAAAAAGTTATCAACTCTTATCCCATAGTAGCTTAGAAAAAATTTTAGAGACTATGCGGAAATCAA GGAATACAAAAAATCGCCCATAAATTCAGAAAGGCGCTAAAAAACCCCTTAAAAACGCTAAGGATTGAGCG AGTTTTAAGCTCTTTCTAAAAATAAAAAATCCACCCAGCGACTTTGGTGTTCAGCGCTTCGCATAGAAAGTCAA TAGCGAATTAGAAGAAATTAAGAAATTTTACAATGCGCTAGAAACCTTAAGGGGCGGATTTTATGCGTGATTCTTTT CATTCTTTAGAAGACGCGTTAGTGAAAAACGCTTTCAAGATTACGCTAAAAATTGCAATTTGCGATCCTTCAAGCTTC AAATGCGCTTGCTCTAACAAACCATGCTTTAGGCGAAATTTAACCAAAAGCCCATCACTCCAAGCGCAGAGAAAT AAAAACAACAGGCGTTACGAAGCGCTAAATGAGGGTGTTCATTCAAATCAAGCCATGAGTAAGTTATGAGTAAGCC ATGAATATCAAAACCCATTCTCAATGAAAAAGAACGCTTTGTGCGCATAGAAAG	2278	LQLDDNDRGNFHSHTLDMRMDLESE LNAQKVINSPYVALEKIFRDYGEIKEYK KIAHKIAERRAKKPKFNAKDLSEFLSSF SKNKKIHPATLVFOAVFIEVNSELEELK EFLQCARNLKAILCVI:SFHSLEDALVK NAFKDYAKNCICDPSSF:KCACSNNHAL GEILTKKPIITPSPEEIKNNRRRSRAKMR VFQFKP
HP0100	2279	ATGCCGAAGCGATTTCAAAATTAATAATCTCATCTTTATCCCTGTTAGAGTGTGTATATGTATAATGTCATTAAC TATAGAAAAATTTCTTACCTTATAATCTAAGCAATGTTAAGCTTAGTTTACAGACGCTCAAGGCAATGTAATCGATCTA GGCGTGATAGAGACTATCCCAACACTCTAAGATTGTTTTACCCGGAGGCGTTTGATAGTCTAAAAAATTGACCC TTATACTTTATTCTTCCAAAAATTGAAGCCACTAGCACTCTGTTCTGACGCTAACACGCGAGGGTGTTTGAAAC GCTCAATAAGATTAAAGACAGATTGGTGTGTAATTATAGGAATGAAAACAAAATTTAAAGATCAGGAAATCATTTGGGA AGCCTTTACCCCAACACCGCAGAGGAATTCATAATTTGATGTTGAACATGATCGCTGTTTAGACTCCCAATCTTG GGGC	2280	AEAISKLFSSLSPIRV_LYMYNGQLTIE NFLPYNL SNVKLSFTDAQGNVIDLGVE TIPKHSKIVLPGEAFDSI.KIDPYTLFLPKI EATSTSVSDANTQRFVETLNKIKTDLV NYRNNKFKDHENHW:EAFTPQTAEFF TNLMNMIADVLSQSWG
HP0100	2281	TTTTAAACGAAAAACCACATTTATCTAGGTTTAGGCTAGGCACAGGACCAATGTGCACACGAGCATGTGGCAAC AAGCCTATAAGACAAACCCACCTGCCCTGGTAGCGTGTGTTATGGCGAGAAATTAGAAGCCCATTTATCAGGGGG TAAAAACCTGTCTTATACCGGGCAATAGCGGATGAATAGCTTTTGATAAACACCATATTTAGGCTTAAGGGTGTG GGGGATGTAGAATACGCTAAAGCGCAATTAGGTCAAAAAGTGGGGGTAAACCCCTTTATCCCAAGCCCAATTATG ACCCAAACGGGATTAACACCTACGATTCTGCTTCAACACTCAAGGCCCTTAGTTTGCAAAAAACCCCAAGCCCTC AAAACCTCTTTTCAATAACGGGCATTTTCATGGCGTTTGGTTGAACGTGAATGTGTTTGAACCTCCCTATAGACA CCCTTTTAAACCTCGCTTTAAAAAACAGAAAAAATGCTGTTTTTTTAAAAATAGGCGT	2282	FKTKNHIYLGFRLGTGANVHTSMWQQ AYKDNPTCPGSVCYGE:KLEAHYQGGK NLSYTGQIGDEIAFDKfHILGLRWGD VEYAKAQLGQKVGGN'TLLSQANYDPN AIKTYDSASNTQGPLVI.QKTPSPQNFL FNNGHFMAFGLNVNVFVNLPIDTLLKL ALKTEKMLFFKIG

HP0100	2283	AGGGAGTGGGCGGCGGCTTAGCGGTAGCGGCTTAGGGAGCGGATACGGCGGGTCTATCAGGC AGCGGGGAGCTATTGCGGGTGGGTTAAACCCACTTATGGAGGGTGAGCGGTATGGTTGATCGCGTA TTGCTCTAGTTTATCAATCGGCTATACGCAAAATGTAAGACGCTTCTATTTTATGACGCTATTAGCGG GTATGATAGCAAGGACTCCAGCGCTAATCTCAAAACCCAGCAACCTTTAAACCTTAACAGAGACAAACGCT TTAAATCGCTGTCTTAATGATCACATTAAGACCGGAGCAATGAAGTCAACTCGCTTATGAAACACCCCTTAAAG CCTTGAAAGAAATGGGCGATGAGATTGTGAAAGAAAGATGTTGATTGCAATTCATCTCTATTATTATTAT CAGCATGGCTGAAGCGAGTTGAAATCTGGCCAGATTGAGGGTGGCTTATGGAGGAGGGCTCAAAATATTAA GATTGAAAGAAATTGATCTCAAAAGCCGAGTGAAGGTTTGGCGATGAGTGAAACGGCGCATCATGTTAGGGAA TTTTGCTTAAGCAGTGGTATTATGACGCTTATTATTGAAAGCCAGCAATGCGTTTGATAATTAAAGAGCAATAC AACAAAGATTTTGAAGAAGTGGATTGATTTTACCCCTGTAGCTCCAC	2284	GSAAVAGGLAVALGSDTGGIRQP ASYCGVGLKPTYGRVSRYLAIYCSS FDQIPITQNVEDASILFDAISGYDSKD STSANLKPTQTfKNLNRDKRFKIAVLM DHIKASNEVQLAYENTLKALKEMGHE IVEKMLDSHYQISIYIISMAEASSNLA RFDGVRYGRRRAQNIKDLKELYLSRSE GFGDEVKRRIMLGNFVLSGGYDAYYL KAQMRLLIKEQYNKIFEEVDLIFTVPAP
HP0100	2285	AGAAACCCAACTTAATCGCTTAAAGACGCGGCTAAAGAGCTAGGTTAGACGCTCAAAAATAAGCGCTCCAA GCTCTAAATCGGCGCATGAAAGGATTGACCCCTTTTAACTACATGGCTATTATAACGAAATTTGAAATGCT ACAGGAAACCATTTTTCATGAAGAGAGTTCAAAATCAATAAAGGCATGGACAGGTGGCTTTATCCGGACATGGTG GGGTTAGGTTTTGACGCTGAATATCTAATGAAATTTAATCGCTTTTCTAAGAAATTTGACACTTTACCCATTA AACTGGTGAGCTTTGAATTGAAAGAAAGAAATCAGCGTGCTAATTTGAGGGAGTGTACTTTCAAGCGATTCCCAACA GCTCGTGGGCTAATGAAGGTTATTAGTGGCGCTCATATTGATACGCACATCTCAACTCATGGATTGT	2286	ENPTLIALKDAAKELGLDAQKISAPSSKI AHERDLHPFLTYMAINNENLKCYTKTIF HEESSKSIGMDRWLYPDMVGVRFLLH AELSNENLIAFSKFKFDTLPIKLVSFELKK EISVHNCRECYFQAISNSSWANEGYLV GRHIDTHNPQLMDL
HP0100	2287	CGTGATGCCAAGAGCGGCTTGATGAAGCTTATGAACCTGGCTACTATCAAGATAGCATTTTGTAGTTAGGGG ATATGATGAGATCCCGGGAGCTATGGAGTTTGATACAGCCAGAGAAAGGGTTGGATGACGCTTTTGTAT TCGCCATGCAAGCTTTAGAGATCGCTAAGAAACCTACTAAAGAGTCAATTTATTTGCGATCGGTTTGAACCC ACAAAGCCCATGAGCGCTAGCGTTTATGGAGCGCCAAAGAAATTAATACCTTTTTCACATTAACCCAC ATTCTAGTGCCTCCAGCGTGAGCGGATTTTAAAGATCCAGCATGCCAGATTACGCCCTTTTAGCCCTAGCCA TGTGAGCGTGATCAGCGGCTCAATCTATGCTCTTTAGTGATCGCTTAAATCCCATTTATCTGAGCGGTT TTGAGCCGGTGATATATTAGAAAGCGTGCTGATGCTTATCAAAACAGCCCTAAACAAAGAACGCTAGAAATC CAATACAAAGAGCGGTGAGTTTGAAGGGAATGTGAAGCGCAAGAGTAGTCAATGCTTGATGGAAGTTAGGG AAATTTTGAATGGAGAGGTTTGGGAATATCAACGATCCGCTCTCAACTCAAGAAAGCGTTGCTTTATGACG CTGAAGAAAGCTTTAAAGAAATTTAAGCCACAAACCTCTAAGAAACAAAGCATGCAAGTGCGGGAGATTTTAA AAGGCATCGCTAAGCCCTAGACTGCTGTTATTCGCTACAACCTTGACCCCAACCCGATCGGCAGTTGCATG GTCAGCTCTGAGGGGCGTGCGCGGCTATTA	2288	VMPRARLDEAYELATIKDSIVLSLGD MRVPGSYGLIQAAREKGLDARFLYSP MQALEIAKENPTKVYIYIAGFETTPMS ASVLSAKKEKINNLFHINHLVPPSV SAILKDPACQINALLAPSHVSVISGAQIY APLDVRFKIPIVSGFEPVDILESVMILIK QALNKEAKLEIQYKRAVSFEGNVKAQE LVNACMEVRENFEWRGLGNIKRSALK LKEAFASYDAEEVFKEYLSHKTSENK ACKCGEILKGIAPLDCLSLFATTCTPQN PIGSCMVSSSEGACAAAY
HP0100	2289	CATCATCCAAAGGAGCGAGTGATGGCATTATCGTGCAATTTGGGGGACAAACCCCTTTAAACTCGCTAAAGATT TGGCTAAATGCAAGCCCCCATTTATGGCACGCTTTAAAGTGATTGATATTGCAGAAACAGAGGAAATTTTCCC TCTTTTAAAGAGCTTGACATCAAGCAGCCCAAAACCGCATGGCTAAGAGCGTTGATGAAGCTTATAGCATCGCT AATGTGATTGTTTCCCTATCATTTGCGGCTAGTTATGTGCTAGGGGCCCAACACATGCAAAATTTAGAAACATT GAGGAATTGGCCATTATTGGAAAGCGTTACGCTGCTTTAGAGATTAGTCTAAACCCGCTTCTCATTTGATAAG TTTTTAGAAAGCGGTGAATTAGATGTGATGCTATTGGGATAAAGAGGTTTATATTGCGCGCATTTTACAG CACATTGAAGAGCGGGAATCCATTGAGCGGATTGCGGCTGCTTTATCCCTTCCACTTAAGCCCTGAATTTTAGAT GAAATTGAGCGGGTGAGCGCAAAATCGCTCTGCAATTTGGCGTAGTAGGGCTGTTGAATATCCAATTTGCTGTGCA TCAAAATTCGCTGATTGATTGAAGTCAATCCAGAGCCAGCCGACCGTGCCTTTTAAAGCAAGGCTTTAGGCGGT TCCCTTAGCCAAAGTGGCGACTAGGGTTATGGTGCTAGAAAGCTTGAAGAGCGCT	2290	IIQREVRDGIIVHFGGQTPLKAKDLAK MQAPIIGTPFKVIDIAEDREKFSFLKEL DIKQPKNGMAKSVDEAYSIANVIGFPIV RPSYVLGGQHMQLIENIEELRHYLESV THALEISPKNPLLDKFLKAVELDVDAL CDKKEVYIAGILQHIEEAGHSGDSACFI PSTLSPEILDEIERVSAKIALHLGVWGLL NIQFAVHQNSLYLIEVNPRASTRVPFLS KALGVPLAKVATRVMLVEDLKEA
HP0100	2291	GAAAGTGATAAGTTTAAACCAAAATCCCTCTTTTAAAGCGGTGATGGTATCCCTAATAGGCCCATTTCCAC CAAGCAATCGCCCATCTTTGCCAAGCGTTACAGCGTGCAAGAAAGCGGTGTTAACCTTCGCATGCGAGTTTGA TGACGATGGCGATTGTGAGGGGAAGTGGGATTATTGCGTTGTTGCTTAAGACAGGATGCATCAATATAAGCGC ATGCAAACTTACCCGTTGTTGGCATCCAAAGATCGCTTAGAAATTAACGCCCTAATGAGCACGCTTTTACAG GAGCGGTTATCGTTTAAACATGTGTTATGAAGAGACGCCCTAAATTAAGCAGGTTTGAAGCAAGAAATCCC TAAATTTAGGGTAGCGGTTTATGATTTTATGATGAGGCTTCTATTGAGAAAGACTGAATTAATAATCCGCATGT GTGTGGCTGCAGAAATGCGCCAACTCAAAAGGATTGTGCTTGAAGAGCTTTGAAAGCTTTGAAA	2292	KVISLTKIPSFLLKAVMVPINRAISTKQS RHLLPKRYSVQESVFNLSHASLMTMAI VQGWDLRLCCSKDRMHQYKRMQTY PVLFAIQIALENNALMSTLSGSGSSFF NMCYEEDAPKLKQVLSKKFPKFRVAVL OFONDGVLEKD

HP0100	2293	ATGATTGATGCTACCGAAGCCTTCTAGCAATGCTTCTAGCGGATTTTCATGCTCAGCCACAAGCTCCACA AGTCCACAATAGCTTTGACAAATCTTTAGTCGCTACCTCCAAAGTCCAAACCATCAACGGCAAGAGCAGATCGG CGTGAATCTTTTAAACCTTGCTCTCAAGTGTGAGCGTTTATAATCTTTAAAACTTCAGAAAGAAATTTGCAAAA AACGCCAATATTTATGCGCTAATGGGACGCAATCTGGACAGCTCATGCAATAGCTCTTCAGGGGTTTGAGCAT CAGCGGACGCCCAATGCAAAATATTTAAGCCCTACTAGTGGACTACCACTAATACTCAAGCTAAAGCAACG CTCCAAACTAAAGCGATGGTGGTGAATAATGAAGAAGCTAAACCGGCAATTTAGCCCAAGCAGCGG GACAAACACAACTCTCTAACAGCAGCGGTGATGGAGCTTTAAACACCGTGTGCAAAATGTCAGCAATTTCCAA AAGCATTCAAAACGCTTTTCAAAACCAAGAAAGTAATATCAAGCTTGGCGAATGCGATTATACACTAATGGGA GTCAGTCGCAAGAGATGACACCTAACATAACCAAGATTTACGATCCAAATGAGGGCGAATTTTACCAGCTCATCA ATACCATTAACCAAGAGTGCCTACAGACATGAATGCTTTAATTAATCAAGCCAAACCAACCAAGCGGAT CAGCAAGCAATAAAGCATGCGGAGTGAATGAGTGGAGTAATGGTAAGTGGTCTATCAGCAATGGTCCGA TTCTAAGGCTTATTACAGCGGTTGCAAAAGCGCTTTAGGGTATCAAAACGCAAGCAACTCAAGCGGAGCAAT GGTGGGAACAGCATCACCTACAATGTCCAACAATCACGCTCACTAGTAATGGTTGCTCAACCAATCATCAAAAT CTTAAGAGCGTTAATGGAGG	2294	DCMTATGSLSSNASSGSCSATSSSTSS TNSFDNSLVATSKVQTINGKEQIGVNS FNLVSQVSWSVYNSLKTSEENLQKNANI LCANGTQSGTSSCNSSSGGLSIGNA QLQNILSPTSGTTTNTQAKSNAPKLKA MVVNNEEEAKTANLAQSSG'ITTTQSP NSTVMGALNTVLQNVSNFQQ'ISQNAF QNQESNIQAWANAIYNTNGSCSQEMT PNNQDLRIQLRANFYQLINTINQQVPT DMNALINQSQQTQQTSGSASINNACA SGMSGNGNWCYQQWSDSKAYYS LQSALGYQTQATTQSGSNGG'VSITYN VQJITLTSNGLLNQIITNLKSVNGGNGA SGTSGNGTSQINTAYQMLT'IASDGGK LGTYSSSSGSNNGYT'PCNSTNGSNKT SGNNCYEPNKKQNAATTATAT'IDSNLQ KVYNDAQIANIIFASSGNNGVENGK QFFEALKNNSSLSLNLGNGSSGSSG TTCSGWL
HP0100	2295	TGGAGCAAAACCAATAAGGAATATTTCTTAAAGAGCAGCTCAAAACAAATCCAAAAAGAGCTTGGCACAGACAAACAG CGAGATGAAGATTTAAACCAATACTACCAAAACTAGAAAGCATCAAGCCTTTTAAAGAAAGAGCGTTTAAAGGAG ATTAAAGCAAAATTGACCGGTGAGCGGAACCCATGCGGACAGCTCGGATAGCGGACTTTACAAAATTATATTGA AACCATGCTGGATGTCCTTTTGGGCAATACGGGAAAAAGCGCTTGACATTAAGCATGTGAGAGAAACAACTAGACA AGGATCATTATTCCTTAAAGGCCCTAAAGAGCGCATTTAGATACTTTGCCACCATGCAGCTTTTAGAAATGCGCC GCAAGAAAAGCCAGAAAAAAGACAAAACCTAAAGGCACGATTTATGCTTTTATGGCCCTCCTGGCGTGGGTAA ACAAAGCTTAGCTAATTCCTCA	2296	EQTNKEYFLKEQLKQIKELG'DKQRD EDLNQYYQKLESIKPFLKEEAFKEIKKQ IDRLSRTHADSSDSATLQNYIETMLDVP FGQYGGKALDIKHVREQLDKDHYSLKR PKERIVEYFATMQLEMRKK'KPEKKD KTKGTILCFYGP'PPGVGKTSANIS
HP0100	2297	TGGCTAGGGAAGTGGCTCAAAATAAAACGAAAGCGATTCTGTTAAGGAGATCATTGGAGCGAGAAAGCCTCTAAAACT AAAAACAGCGCCATTGAAGTTTCCAAACACGAAAGCTTCTGCTATGAAGAACGAACGATTGGAAGCGCGCATCTTAA AAAGGTGTGTGAGAAAATCAAAAGCGCACTACCTTTGGGATCATCTCAGCCTTTAAACCTTTAAAGACGCTTTTAA CAGAGATTTCAATCATATGAGCAAAAGTTACTGATAGGGGAGCTAAAGCGGTTGCATTCAATCTAGCGCTGATA AACTGGCTCAGTTAAACCGCGCTTACTCTACTGGCAAGACAAATCTGTTAAAGTGGATTGGGATAAACCCCATTTTAA TCAAGGACTTCTTTAAGGCAATAATTACCTTTATAGGAGGTTTGTGTTTATGGGAAGCATTTTATGGACAGATT TTTAAAGAAATAACGCTAAGCGGAGCGTGAAGACTTTATGCTAGTAAGGAGTTTGTGCTAAATACCGATACACCCC CAAGCAAAATACAGAAAGAGCGGAAAGAGCTGCAATCGTATTTAGAGAAATAGCGGATTTTATAGGTTTGTTCAGC GCTTAACCTCTTAAAGACAAACCGCAAGATCCTTTTACCAATGAAGAAACGAGCTTTTGTGTTGCTCGCTAATGA GCCTACTATCGTGTATTAATTAAGGGATTATTTATGGTGTAGCGCAATCTTTAACCAACAAAGCGATCTGTTATTGT GAAAGCAATGCCCTATAGAAATTGATCAACGCTT	2298	AREVAQNKT'KRFVKEIGSEK'ASKTKN SAIEVSNTKASAMKNETIGSG'ILKVC EKKSALPFGIISAFKPFKDAFYRDFNH NEQKLLIGAAGSGCQSSADKLAQLKT RLLYWQDKSVKVDWDKPIKIDFFKGN NYLYRRFCFLGKHFMDFLKNNAKAS VKDFMSSKEFVAKYRYTPKQNTERAK KLQSYLENKRDFIGFVQALNSL'KDNPO DPFLPNEETSFLV'FANEPTIVFNLRDYL LVLAQIFNQQAICYCESKCP'IELINA

HP0100	2299	GGGGGCGAGCTGGTGGCCGGGATTGCAGAAAGATTGAGCCGATCATGGAATTTAGCCAAACTTACAAAGGCAAG GTGGAATTTTAAAGTTTCTTTTATGAGAGCCAGGATCTCAAGAGAGCTTAGGCATCCGCAAGATCCCTACTTTG ATTTTACAAAACGCCAAAGAGTGGGGAAGCTGTAGAACCTAGCTCTCAAAACCGATTGAAGACGCTCT AAAGCGTTATTGTAAGGGGTATCATAAAGGGCGTTATTAAAGAGCCCTATTGTAAATAAGAGTTACAGAAATCTT TTAGCCCTTTTATAAAGGGCTAACTCAATAGCTTTTATCTTTATCTTATCTTAAATCGTTTTATCGTTTT TAAATAAGCATGTTTGTAAAGTTTCTTTAATTAAAGCTAAATGAGCGAATTTGTGTTATGAGTGTGAGTGGA AATTTGAGGCTAAACTTGTAAATGTAAATAAGAGCGATAAAATGCTAAATCCGCAAAACACTGTGTGT TAGATTAGAAGTTTAAATTAAGAACAGATGTATCTGTTTAAATTTGAATAGGAGTTTCTATCATTATGTTATTGAA AACAAATTAAATTAAGCTCGGTGATTTTGAAGCGCTTATTGTGGTGGTGTCTCAAGCGAAATGGCAACTTA TCAAAACGTGAATGATGCCACTAAATACGACTGCAAGCATTA	2300	GASWCPDCRKIEPIMENLAKTYKGKVE FFKVSFDESQDLKESLGIRKIPTLIFYKN AKEVGERLVEPSSQKPIEDALKALL
HP0105	2301	GTGCGTGTGCTGATCGCAAAAGGGCGTTAATGGGATTGATTGTCAATACGATGTGGCTTCAAGCAGCCCCA ACCAAGATCACATGGACATGCCATAGCTACCTACATTTTAGAGCATTTAGCGCTGAAATATCCGCAACCATGCCAGTT ATGTCGTGATTGGTGGCTATGGTGGCAACGGGATTTATCTCACAGTGTAAACCATGACAAATTACACAGAG ATTTAGAGGTTTAAAGAACCATGCAAGATGTGTAAGGCTACAGAAAGTGCCTGCCAGCAATGAAAGCAATG CGGTTGGGCGCTAACCAACATTTAGAGGCTGCTAAGGATTTAGCGCGCTTTTATAGACAAACGCGCTGAGTGG TCTGAAGTGGGTTGATTGGTTGGGAATGATTTTACCCCTATCCCTTACCCATTTATTTACCCATTTTGC CCATAAGCGTTAAATCCAATCAAAACCATCGTATCGGTGTTAATATTGTGTAATAATGTTATGAATCTCTTGT ATTAAGAGGACTTCAATGAAATAATGGTTTAGTCATCTTTTAAAGCTAGCGCTTCAATATCTGCAAAAGAGTCA AAATAGTGTTTTAGAACTTCAGACATTCATGGG	2302	VRVADRKKGVNGDLVKYDVRFKQPN QDHMDMPSLSHLEHLVAEIIRNHASYV VDWSPMGCQTGFYLTVLNHDNYTEIL EVLEKTMQDVLKATEVPASNEKQCGW AANHTLEGAKDLARAFDKRAEWSEV GV
HP0105	2303	AGGTGTTCAAAGACAGCAAAAGACGCTTGGGTTCTATCTATGAGATCAGCGAGTTTCATGAAAGCCTATACCGCA TTGCTAAAAACAAAGACCGATACGCTATTATTAGGTATCTCCCTCTAGGTATTGGCCAGCATTTTAAACGACT GCCCTTATGTCAATACCTGATTGACGCTTGAAGAGCTTTGGTGTCTATTATTACCAACTTGGATTGCAG GAGCACGATCACGCGCATCAAGCAACCATGATCAACATTATCAAAACGTTAAAGCAATAAGAGCGTTGAAACC ATCAAGAGCTTATATTGAATAGCATCGACTCTTAAACACTTTGATCAATACCTCTATACTTATGGATAGCTCTT CTGTTTATCATAGCAATGGTGGTCTGCTTACGCTAGCTAATTTATTCATGGCAGATGAAGAGAAACCCCAT TTATCGCTATGGATGCCGAAACCAAGTGAGCATATTTTGCACAAACGCCCAAGAGGAGTCAATGGAACGC GGATTTTGACAAAGAAAGAGAGAAATGGGTAATAATATCGGAATTTAACCTTTTAAAGCGTAAAGAAACGC GCATGCTTTAAACGGGATTTTGATGAAAGAAAGAAATTTATGGAGGCAAGACACGAGCAAGTATTAGCTGTTA TGACATCACTAAAGATTGTAGCAATTATAGG	2304	VFKDSKDACGFIYEISEFMKAYTALLK KQDRYVYLLRYLPSRYWASILTTALYV KYPDFDALKKLLVSYYYQTWAGGTTR IKQTSINIKNVKSNSVETIKELINSIDS YNTFDQYLYNLWDSSSVYHSHKWRPV LALANYFMADEEKPHFIAMDAETQVEH ILPQTPKRGQWNAFDKEKEEWWVN N/ANLTLLKRKNAHALNGDFDEKRIY GGKDTSKVISCYDITKELYSNYR
HP0837	2305	AAAGTGATTTATTAGATCAAGCCCCCATAGGCAAAACCCACGAAACCCCTGCCACTTACACGGGAGTGATGGA TGAAATCAGGATTTATTGCGGAGCAAAAGAGCTAAATTTTAGCTATAGTGGAGCCGTTTAGCTTTAATGTT AAAGGAGGCGGTGCGAGAAATGCCAAGGCGATGGGACATTAAATAGAAATGCACCTTTTGCCTGATGTGTAG TCCAATGCCATAGCTGTAAGGGCGCTAAATACACCCCAACCTTAGAATCAAGGTGAAGGCAATCCATTGCC GATGTGTTGAACATGAGCGTGAAGAGGCTTATGAATTTTGTAAATCCCTAAATCGCCGTGAAGTTAAACCG CTTATGGATGTGGCTTAGGCTATATCACTTTAGGCAAAACGCTACGACTTTAAGTGGGGGGAGGCTCAAAGGA TCAATTAGCTAAGAAATTGAGTAAAGAAAGACACAGGCAAAACCTTTATATTTTAGATGAGCCTACTACCGGTTGC ATTTTGAAGAGGTGAATCATCTTTTACAAGCTTTCATCTTTAGTGGCGTTAG	2306	KVIYLDQAPIGKTPRSNPATYTGVMDEI RILFAEQKEAKILGYASRFSFNVKGG RCEKCGQDGDIKIEMHFLPDVLVQCDS CKGAKYNPQTLKIKVKGSIADVLNMS VEEAYEFFAKFPKIAVKLKTLMVDVGLG YITLQGNATTLSGGEAQRIKLAKELSKK DTGKTLYLDEPTTGLHFEDVNHLLQVL HSLVAL
HP0837	2307	CACCCCATTTCTACGCTTAATATGTCATTGAACGCTATGGGCTGGGCTCCAGAAATCCACCATTTTC ACCTCTCAAGCCCTGGCTCTAGCCAAAGCGG	2308	TPILTPNNVIELNAWAWAOWLQNPFFHP LKPWL

HP1246	2309	GGTTATCACTAATCGTGGAGGGGCGCACTTGCCATGCCGCTATTGTGGGAGAGAAATTGGCGTGCCAGCTATCGTT GGGGTAGCGGGGCGGACTGATAGCCTTTATACCGGCATGGAATCACGGTTCTTCGCTGAGGGCGAAGAGGGC TATGTGATCGGGCATTTATGAGCATGAATGAAAGGGTGAGCTTTCTAACATGCAAGAACTCAACAAAAAATT TACATCAATATTGGAACCCCTGAAAAAGCCTTTGGCTTTCTCAACTCCCTAATCACGGCTAGGGCTAGCCAGGAT GGAATGATTATTTAATCAATCAAGCCCACTTTAGCTTTAGTGATTGCACCACAAAAAGCGTGAAAGA AAAAATGAAATTGAAACCTCATGGCAGGCTATGCTAACCTAAAGATTTTTGTGAAAAAATCGCTGAAGGCAT TGCGATGATCAGTGCAGCGTTTACCCCTAACCTGTCTATTGTGAGAACGAGCATTTCAATCCAATGAATACATGC GCATGCTTGGCGGCTAGCTATGAGCCTAATGAAGAAACCCCATGCTTGGCTATAGGGGGCTAGTCGGTATTA TTCAGAGAGCTATAATGAAGCGTTTTCGTGGAGTGTGAAGCCTTAGCGTTAGTGAGGGAAGAAATGGGATTAACCA ACATGAAAGTGATGATCCCTTTTTCGGAACCATTTGAAGAGGGTAAAAAGTCCTAGAAATCTTAAGAAAAACAATT TAGAATCCGGTAAAAACGGGCTTGAATTTATATCATGTGCGAATGCGGCTGAATGTCAATTTGGCTGATGATTTCT TGAGCTTGTGATGGCTTTCTATTGGATCAACGATTTAACCCAGCTCACTTTAGCGTGATAGACACAGCGAAT TGCTCAGCCATGCTTTGATGAAAGGAATGAAGCGATGCTAAAG	2310	VITNRGGRTCHAAIVAREIGVPAIVGVS GATDSLTYGMEITVSCAEGEGGYVA GIYEHEIERVELSNMQETQTKYINIGNP EKAFGFSQLPNHGVGLARMEMILNQI KAHPLALVDLHHKSKVKEKNEIENLMA GYANPKDFFVKIAEGIGMISAAFYPKP VIVRTSDFKSNEYMRMLG:GSSYEPNE ENPMLGYRGASRYSESYNFAFSWEC EALALVREEMGLTNMKVIMIPFLRTIEE GKKVLEILRKNKNLESKNGLEIYMCEL PVNVILADDFLSLFDGFSISNDLTQLT LGVDNRDSELVSHVFDERNEAMLK
HP1246	2311	AAATTTTAGCGGACGACAGCCACGACTTTAGAGGTGATGGCCTATCACATGGAAGAAATTAGAAATTAAGATGAA GATATTGCGTGTGTTGATGGCGCTTACGCGCTTTACAGAAAGCATTTAAAAACGCTTTTGAACCTTTAAACA AAAACCAAAATACGGATTATGTTTACATGCTCTCCATTTAGCGCTTCCGCTATCGTCTTTAGTCTTGAACACGG CGTTCAATGGCTTTAAAGAGCATTCAACACGCGCACGCAAGATTTAAAAACGCTCTATCATGACGCGGGGTTGC TTTATATGGGAAGGCTCAAGCCTTTAAAGAAATGCGGCTATTTTAGTCAAAATCTATCGCTTAGAAATATCGCC CTTAGAAGTCCAAGATATTGCACACTTTAGAAGATTTAGAATAGCCAAAGCTCAATACAGCCGTTTGAACAAACGCAT GCCAGTAAAAATTTGTGCGATTGTTTAAACAAGCGGTTAGGCGATGTAGCGGCTTGTGAACAAATCCTTTCTTT TATAGAAAAATTAGGGTTGAAGCGAGCCTTTATTTACACAGCAAAATAATATAAGCGCTTTTATAGAGGGCGTT CGGAGCAGAAATTCAGTAACTAAGAGTTACATGGAATGATTAAAGCGCTTTATGAAAAAGCGATGGCCCTACT TTGAAATCGTTTGATCAGTTTGGAGGGATGTTTGTGGAGTTTGAATCCCTGAAATCGGAGAAAGTTTGTGCGT CATCGGAAATTCAGGCAAGACCTTATTAACAATAAGCTGGATACAGAGAGTGGGAAATTCAAATTTTCTCAAAAA TGCGCGGATTTAAACTGGCGGATTTAAAGGGCATCTACTTGTTGAGCCAGCTGAGTGGCTAGGCTCTAAAT GGCTGAGATTTATCCGTTCCATTTAATCTCTCCGACCCCAAAATACCGTGTCAATTCACAGCTTGATAACACTTGGGT TAGGAATGTGTATAAAATCAAGGCAGAGAGCCTGTAAATGATCAATGAAGCTAGACGCTAATAAATTAGGCATTAGGCA TGTTGAAATTTGTAAGAGTTAACGCTAGGGGAGGTTGTTAGCAGG	2312	ILADDRATTLEVMAYHMEELELKDEIA CCLYGASALLQEKHLKNAFETLNKNQN TDYVFTCSFASPYRSFSLENGVQM AFKEHSNTRTQDLKTLYHDAAGLLYMG KAQAFKEMRPIFSQNSIALELSPLEVQD IAHFRRFRISQAQIQPFKEKRMMPVKILCD CFLTSGLGHVRRCEKILSFIEKLGVEAS LYLHKQNNISAFLEGV EQKFTESKSYMEDIKGLYEKSDGPTLK SFDQFWRDGFVEFEIPENARKFVRHA KFRQDPINNKLDTESGKIQIFSQKADF KLADFKGHPPTWFEPAEWL:GSKMAEY PFHLISPHPKYRVNSQLDNTWVRNVYK IQGREPVMINELDANKLGIRHGEIVEF NARGRLLA
HP1246	2313	GGCGCACGCTTGAATTGAGCGGCTATGAAGTGATGCTAGTAAGGAATTTACAGATATTGACGATAAGATCATCAAC AAAGCCCTAAAAGAAACAAAGCATTTCAAGAAATTAAGCAGCATTTATTTGAATCTTACACGAGGGATTGAAACGCT TTGAACGTGAAAAAACCCAGCCTAGAGCCTAAAGCGAGCGAGTATTAGACGCTATGGTGGCATGATTGAAACGCT TTTAGAAAAAATAATCGCTTATCAGGCTCTAATGGGATATTATTAGACACGAGCAAGGATAAGATTACGGCTC TTTGAGCGGTGCATAATAGCAGCATTTGAATTTGGCGTATTGGTTGGTGAAGAAAAACGGCTTGAACGAGATTG TGTTATGGAAAAAGCTATAAGGGGATAATGATGTGGCTTTGATAGCCCTTAGGCAAGGGCGCCCTGGCTGGCA TATAGAAATGCTAGCATGGTTTGAACCTTTAGCGCTCACTAACACCCCTATCAAAATGATATCCATGCAGGCGG AGCGGATTTGTTATCCCCACCATGAAATGAAGCGTGCCAAACCCGTTGCGCTTGGCGTGAGCTTGCCAAAT ATTGGATGCATAACGGCTTTGTGAATATCAATAACGAAAAATGTCTAAAGTTGGGGAATAGCTTTTGTAAAGA CGCTCTCAAAACTATGATGGCGAAATTTTGGCAATTACTTAGGGTGCATTATCGCTCTGTTTGAATTTCAAT GAAGAAGACTTGTAGTGAATAAAACCGCTTGGATAAATCTATCGTTTAAACAGCGGCTTTAGGGACTCTTGA GGAATAAATCCAACTTTAAAAAGAAATTTAGAGTGCATGCAAGATGATTTAAACGTTTCTAAAGCGTTGAGCGTTT TAGAAAGCATGCTTTCTCCACTAATGAAATTTGATCAAAACCCCTAAACAAAGGCTTTAAAGGGCGGAAATTTAG CGAATTTGAAAT	2314	RTLESGYEVMLVRNFTDIDDKINKAL KENKSIQELSSIIYESYTRDLNALNVKK PSLEPKASEYLDAMVGMIEITLLEKNIAY QVSNNGDIYLDTSKDKDYGSLSVHNSI EFGRIGLVQEKRLQDFVL:WKSXKGD NDVGFDSPLGKGRPGWH:IECSSMVFE TLALTNTPTQIDIHAGGADLLFPHHENE ACQTRCAFGVELAKYWM-INGFVNIN EKMSKSLGNSFFVKDALKNYDGEILRN YLLGVHYRSVLNFNEEDL:VSKKRLDKI YRLKQRLVLTGGINPNFKKEILECMQ DDLNVSKALSVLESMSS'INEKLDQNP KNKALKGEILANLKFIEELLGIGFKDPSA YFQLGVSESEKQEIENKIEERKRAKER KDFLKADSIREEELLKQKIAL.MDTPQGTI
HP1246	2315	GGCGCACGCTTGAATTGAGCGGCTATGAAGTGATGCTAGTAAGGAATTTACAGATATTGACGATAAGATCATCAAC AAAGCCCTAAAAGAAACAAAGCATTTCAAGAAATTAAGCAGCATTTATTTGAATCTTACACGAGGGATTGAAACGCT TTGAACGTGAAAAAACCCAGCCTAGAGCCTAAAGCGAGCGAGTATTAGACGCTATGGTGGCATGATTGAAACGCT TTTAGAAAAAATAATCGCTTATCAGGCTCTAATGGGATATTATTAGACACGAGCAAGGATAAGATTACGGCTC TTTGAGCGGTGCATAATAGCAGCATTTGAATTTGGCGTATTGGTTGGTGAAGAAAAACGGCTTGAACGAGATTG TGTTATGGAAAAAGCTATAAGGGGATAATGATGTGGCTTTGATAGCCCTTAGGCAAGGGCGCCCTGGCTGGCA TATAGAAATGCTAGCATGGTTTGAACCTTTAGCGCTCACTAACACCCCTATCAAAATGATATCCATGCAGGCGG AGCGGATTTGTTATCCCCACCATGAAATGAAGCGTGCCAAACCCGTTGCGCTTGGCGTGAGCTTGCCAAAT ATTGGATGCATAACGGCTTTGTGAATATCAATAACGAAAAATGTCTAAAGTTGGGGAATAGCTTTTGTAAAGA CGCTCTCAAAACTATGATGGCGAAATTTTGGCAATTACTTAGGGTGCATTATCGCTCTGTTTGAATTTCAAT GAAGAAGACTTGTAGTGAATAAAACCGCTTGGATAAATCTATCGTTTAAACAGCGGCTTTAGGGACTCTTGA GGAATAAATCCAACTTTAAAAAGAAATTTAGAGTGCATGCAAGATGATTTAAACGTTTCTAAAGCGTTGAGCGTTT TAGAAAGCATGCTTTCTCCACTAATGAAATTTGATCAAAACCCCTAAACAAAGGCTTTAAAGGGCGGAAATTTAG CGAATTTGAAAT	2316	RTLESGYEVMLVRNFTDIDDKINKAL KENKSIQELSSIIYESYTRDLNALNVKK PSLEPKASEYLDAMVGMIEITLLEKNIAY QVSNNGDIYLDTSKDKDYGSLSVHNSI EFGRIGLVQEKRLQDFVL:WKSXKGD NDVGFDSPLGKGRPGWH:IECSSMVFE TLALTNTPTQIDIHAGGADLLFPHHENE ACQTRCAFGVELAKYWM-INGFVNIN EKMSKSLGNSFFVKDALKNYDGEILRN YLLGVHYRSVLNFNEEDL:VSKKRLDKI YRLKQRLVLTGGINPNFKKEILECMQ DDLNVSKALSVLESMSS'INEKLDQNP KNKALKGEILANLKFIEELLGIGFKDPSA YFQLGVSESEKQEIENKIEERKRAKER KDFLKADSIREEELLKQKIAL.MDTPQGTI

[illegible]

HP1245	2331	CGATATTTAAGCTCTATTTGGGAAGGAGGCTTTTCGCAAGATTTCTCAAACTCGCAAGGCTTTCTGGCTTT AATTTTCCAAATTCGCCCTGAAATTTAGACATAACCGCGCTTTAAATGCTCTGTTTAGACACCCCTTTTAGGCA ATAAAACAAGTGAAGCATCAATATGAGACTTTTAGCCTTAAATCCCTATTGCGTGGAGGCGGCAAAAGATTA GGTTCCGCAACAAGGGAACCGGCGAAGCACTAGGCGGATTTGCTCTTAGAGATCCATATTGAAGAAGATGA AATGTATAGCGCGGAGAAAGATGATATACCCCAATCTTTGATTTACCCCTTAAACCGGCTTTTTCGAGGGAAT TGAATCGCTACTTGGCATAAAACCTTAACCTAACCTTCCCTAACCAAGCGATGCAAAATTCGCGCATTA AGAAAAGGGATCAAAACAGAAAACCTTCGCATGTGGGGA	2332	DILSIFGKGGFSQRFSCNSQSGFN FSNFAPENLDITAAALNVSLDTLLGNKK QVSINNETFSLKPIGVVEE:GEKIRVRNK GKTGRTTRGDLLLEIHIE:DEMYRREK DDITQIFDLPLKLTALFGGKIEIATWHKTL TLTIPNTKAMQKFRIKE<GIKNRKTSH VG
HP1245	2333	GCCCTAGCCAAAGCGGTTTGTGAAAACGACCATGATTAGAGAAATCCCTTATCCTAAAGAGATTGAACTCTAGT CTTGCAATAAAGAGATTTTAAATAGTATGAGGAAATCAGCGAAATCGCTAAACCATCAAGTCATTGTCGT CTATCCGCTGGTGAATGAGAGCGGAAATCCCGTATTTATCGTCAGTGAGGGCGGAGTTTTGGCAAAACGCT TTAAAAGGTTTATACCACTTACGAGGCAAGATAAAATAAGAAAGTGAAGAAATTAGAGAAATCCGGGAGCA TTCTTTAGCGACTACGCTATTGAGGTGGCATTTCTTTACCAAGATTGAGCGTGAATTTAGCGCCCGAA AGGTTAGGCTTAGCGACTTTACACCAAGTTAAGGGGCGGCTTCTGTAACGGCTTGAAGGCTATTGTTTTATG CACGATCCAAAGAAACGAAACGATTAAGAAAGTTGCTGATGAATGGACGGCTTTAAATCGCTGAATTTGATTT AGAATACAGAAAAGCGGGATTACTCCAGGGAGGGAGCAGCGGGAA	2334	ALAKSAFVKTTMIREIPY:PIKEITLVLHK RDFKIVMEKISEEIAKNH:QVIVVYPLVN ESEKIPYLSLSEGA:FWQJRKFKVYTT SGQDKNKEEVEEFRESGSILLATLIE VGLSLPRLSVMLAPERLGLATLHQLR GRVSRNGLKGYCFLCTIQEENERLEKF ADELDGFKIAELDLEYR:SGDLLQGG QSG
HP0399	2335	AAGGCCATTTCCCAACAAAGATTCAAGCTAAATGAAGAATTAGCGGAAACTATGAAACGCCATTATTGAAGGC AAGATTGAGGCAAGAAATAAGGGGTTATATCGTGAGTCTCAAGCGGTGAGTATTCTCTCCGCTCGCACTC TTCTTTAAAGAAATGACGCAACCATATCGGCAACCGGTTAAAGCGTGCATCATCTGTTGGATAAGGAAACCATTC TATCAATATTTCTCGCAACGATTCTTTGAAGTCAATGACAAACGACAACTGAGGTTTCTAAGGAATTGTTAGAAGC CACAGAGCGCGGTGTTAGGGGTTGTGCGCCAGATCACCCCTTTTGCAATTTGTAGAAGCTAAGGGGATTGAGGGC TTGGTCCATTATTCTGAAATCAGCCATAAGGACCAAGTCAATCTGAAATACTACAAAGAGGGCGGATGAAGTCTAT GTCAAAGCCATCGCTTATGATGCAGAAAAGACGCTTCACTCTCCATAAAGCGACTATAGAAGACCCATGGGA AGAGATTCAAGACAAAGCTAAACCCGGATACGCCATTAAAGTAGTGTGAGCAACATTGAACATTATGGGGTGTG TGGATATTGGTAAT	2336	KAISQQIKQAKIEELGENYENAIIEGKIV GKNKGGYVESQGVVEYFLSRSHSLKN DANHIGKRVKACIRVDKENHSINISRK RFEVNDKRLQLEVSKELLEATEPVLGV VRQITPFGIFVEAKGIEGI.VHYSEISHK GPVNPEKYKGEDEVY/KAIAIDAEKR RLSLSIKATIEDPWEEIQIKLKPGYAIKV VVSNIHYGVFVDIGN
HP0399	2337	ACAAACCAAGAGATCCCAAAATCATAACGAACCTTCAAGCCCAACGAAAGCGGCTACAGAAATGAAGCGGTGCT GATTGTACAAATTTAGACAAAGGCTATTATTGATAGAAACCGAGCTTGCGATGCGTTTAAAGCGCATGGGAGTTT GTTGAAAAAATCCAAAACCCCTTAAACCAAAATCAACCCCTTAAACCAACCATTCCTAAACCTAAAGAACGAG CTTGCGCTTGTATTAAGGGGCAACGAGCGGAAGCCCTGGATTACTAGACGCTTTTAAACGACGCGCTTT TAGGGGCTTTGAAGAAGTGTGATTGCCACGGCAAGGGAGCGGGATTATAGAAAAGTTTGT	2338	TNQEIPQIITNFQANEKA RYKNESVLIV QILDKGYWYWIETELGMR:KAHGSLLKKI QKPPKNKFKPPKTTIPK:KEASRLDLR GQRSEALDLLDAFLNDALLGGFEEVLI CHGKSGSILEKF

HP0399	2339	AGCCAGCCAAAGCCCAAAACTAAAGAAAGAAAGAAAGCTCCACGCCCATTTGCTAAAGAAAGGGAGGGA TAGAGATTGTCAACACTTTTGAAACCAACGCCCTACAGAAACACCCCTAAGTGTTAGCCATTCTCAATAG AAAAGCCAAAGCAAAACTCCAAAGAAATCCAAAGAAAGCCGAGAGCCCTAACAAAGCTCACCAAGCAACGCTAAC AACGCCAGTAACGCTAACACGCTAAAGAAAGAAATCAGCGAAGTTAAAGAAAGCAAGAGATCAACGCCATGA AACATTAAAGAGCGCACCGGTTTAGGGTGATTAAACGCAACGATGAAGTAGAAATGAAAGTGAAGCAACAGCGTAA CAGAAAGCAAAACCCCACTCAAGCGCGGCTATTTTGAAGACATTAAGAAAGATGGCAAGAAAGAGACAAA CAAGAGCTAAAGCAAAACCCAGTAAGCCCAAGCCACCCACCCCAAGCAACAAATCCCATATAAT TGATTTAGCGATCGGAGGATTTAAGGCAATGATATTTATGATGAACCGATGAATCTTATTGTTGATTG CATGAACAAGATAATTTCAATAAGGAAGAAAGAAAGAAATCCGCCAAATATCAACGACAGGTCGCGTCCA AAGAAACCCCTTGATGAATGAAGCGGGATCAACGACAAATCCAGAAAGAAAGCGCATTCCTGTAACGATAACA GCCAAAGTGATCCAAAGCAGACTGCAATCCCTGAAGAGTGCGGCTATGAATTCGCGCAAAAGCGAATTG AATCTAGCTGATGATTAAACCCCTCTTAATTTAGGCTTATGTAACATAAAACGACTTTTGGATAAGGATAGCA TAGAAATTTAGCCGAAGAGTTCCATTTAGAAATTTCTGTTCAAAACACTTTAGAAAGATTTGAAGTAGAAGAGTGCT AGAGGGGTGAAAAAG	2340	SQPKPKTKKKEKKEAPTIAKKKGIEI VNTFENQTPPTENTPKVSVSHSQIEKAK QKLQIKSREALNKLQSNANNA NNAKKEISEVKQEQEIKRHHENIKRRT GFRVIKRNDDEVENESESVTESKKPTQ SAAAFEDIKKEWQEKDKQEAQKAKP SKPKATPTAKNNKSHKIDFSDARDFKG NDIYDDETEILLFDLHEQDNFNKEEEE KEIRQINDRVRVQRKNPWNESGK RQSKKKRAFRNDSQKVIQSTTAIPEE VRVYEFQAQKANLNLADVIKTLFNLGLM VTKNDFLDKDSIEILAEFFHLEISVQNTL EEFEVEEVLEGVKKERPPVVTIMGHVD HGKTSLLDKIRDKRVAHTEAGGITQHIG AYMVEKNDKWVSFIDTPGHEAFSQMR NRGAQVTDIAVIVIAADDGVKQQTIEA
HP0399	2341	CGAGCCGGAGCGTTTGAGCGCTTCAACAAACCGCAAAAGCGTTTCAGAGAAACGGCAAAACCGCAGAGTATT CAAAACCATGAAGCGCTTCGACCATAAAGAGCATCGCCCTAACAAAAACCAAAACCAACCAACCAAA CATGCCAAACACGAATACGCCCAAGAAATGGATAGCAACAAAGTAGAGCGGCTTACGGAAATTTTGATGT GAATGAGAGAGGACITTAGGCTTTCATAAGGAGTTAAAGAGGCGTTGAAGCGAATAACAGATCCAAAGTGGAG CATTAAACCCGCAATTATAAGATGAACCTTAAGCTAAAGCGAGCGTTAAATCACGCCCTTAGGGGCTTGGGTGA GATTGGGGGAACATGATGTCATTGAACCCCAAAAGCGCGATCGTGATGATCGGGCATGAGCTTCCCTAAA GAGGGCTCTTTGGCGTGATATTTAATCCCGGATTTTCTACTTGCAACCAATCAAGGACAAATCGCTGGCAT ATCATACCCCATGCCCATGAAGATCACATAGGGCGCACGCTTATTTGTTAAAGAGCTGCAATTCCTTATGG CAGGCCCTTGAGTTGGGCTGATTGGGAGCAAGTTTGATGAACATGGTTTGAAAAATACCGCTCGTATTTTAAAT CGT	2342	RAGAFERFTNRKRFRRENAQKNAEYS NHEASSHHKKEHRPNKPNHHKQKH AKTRNYAQEELDSNKVEGVTEILHVNE RGTLGFHKLKKGVEANNKIQVEHLNP HYKMNLSKASVKITPLGGLGEIGNM MVIETPKSAVIDAGMSFPKEGLFGVDI LIPDFSYLHQIKDKIAGIITHAHEDHIGA TPYLFKELQFPLYGTPLSLGLGSKFDE HGLKKYRSYFKI
HP1244	2343	CCAAGAAATGCACATTCTTATGATCCACATCTTATCGGATTCGATTGCAATGAAAGGCATTCGCTCATAAATAGCCCTAA TTTTGAATTTCTTAGGATTTGGTAGTTTCTATCGTTGGATGAGTTTTCCTTGAAGAAATCAATGTTGTTGGAG TGAGTAGGATTTCTTGCTCGCTATGGCTTGAAGACTTCTTGGAACT	2344	QEMHILMIHILCOCIERHFAHKN
HP1244	2345	GATGAGGCAATTGAACGATGTTTATTCTCAACCTACTTATAGTAGAAGAGATTAATCCAAGATTGAGTTTAT AAAGAAAGTATCACTAAGCATCAGCGCTGATTGAACGAGCTGGATATGGCATGCGTAATTTAGCTTATGAAT CAAAAAGCACAAAGAGGCTATTATTATGTGGCTATTCAAGCGGAGCGCTCAATGATTGTAGAGCTTGAACGAT TGATCGCATCAATGAAGACGTGTTGCTTTCATTGTGATCAATACGAAGCAAGAAAGTGAAGCGTGGCAT GCGTTGGTGATAGGCTAATAAAAGCCATCGCACGCCCAAGAAACACGAAACCGAACACACGCAATTCCTCA CCACACAGAGGAAGCAGAAAGCGTAGGATCTATAGGATAAG	2346	MRHYETMFIKPTLVEEIKSKIEFYKE VITKHGVIFETSLDMGMRNLAYEIKKHK RGYYVAYFKAEPMSMIVELERLYRINE DVLRFIVIKYESKKEVEAWHALVDRAN KKPSHAKKEKHEKTEHTSHHTEEAES VGSHE
HP0276	2347	CGCAGGTGATCCGACGATTTTACTAGAGCTTAACCGCATGCTCACACATCTTTTATCAGCGTGCATGCTTAG ATGTGGGGCGATGAGCGTGTGTTTGTATGCGTTTAAACGAGGAAATAGGCTTGGATTGATGGAGGATTATTGC GGGGCTAGGCTACGCATACCGCTATAAGGATTGGGGCGTGCCTTTAGATTACCCCTAATGGTTAGAGGCTT AAAAAGTTTTTAGCGGAATGAGGGAATGCAAAAACCTCATCAAGGCTTATTGATAAGAAATCGCATTTGGCGGAT GGGCTTGAAAAATGTGGCGTTGTAAACGCAAAAATGGCGCAAGCTGGGCGATGAGCGGTATCATGTTAAGAGGG ACTGGATCGCTTATGACATCAGAAAGAGCGCTTATGAGCTTATAAGAGCTTATGATGTCGCGGTGGG CAATTATGGCGATAGTATGATAGTATTGTTGTATATGTTAGAAATGATGAAAGCGTTCGCATCATTAACAGCGTC ATTCTATGATGCTAAAC	2348	QVIRITILLELRMISHIFFISVHALDVGA MSVFLYAFKTRREYGLDMEDYCGARL THNAIRIGVPLDLPNNWLEGLKFLG EMRECKLIQGLLDKNRWRMRLENV GVVTQKMAQSWGMSGIMLRGTGIAYD IRKEEPLYELKELDFDVPVGNVGDSD RYCLYMLEIDESVRRIIEQLIPMYAKT

HP0276	2349	ATTGCAAAAAGAGGGCTAGCCTAGAGAGTATCAAAAGCGTTAAATTAGGCTTATGCACGAATAGAAATTGATTACG GCATTGAAATAAAGGCTTGAATAAGACAAGCTCATTTGAATTAGCGTGTAGGCAAGAGCGATAACGATCAGAAA ACCTATTTGGCGCTTTTGGATCGCATCATGTTCCCTATTATAGCCCTAGCGCTCAAGTGGTGGTTTGGAGGGCG CACCTTAAAGAAAAGCGGCAAGTATATCAATCGCCCAAGTAAGCTTTTGTATAATCCAGTTTGTCTATGG CTATCATTTGGCTAAAGAACACATCTATAAACAAGCAAGTCAATTGTAACAGAGGGTATTGGATGTGATTTATTG CACCAGGGGGTTTTAAACCGCCATAGCCACGCTTGGGACAGCTTTAACGCCATCGCATTTGCCCTTGCCTTAAAAA AGCGATCCCGAATCCTTTGAGCTATGATGGGATAAGGCGGCAAGCGAGCCTATAAAGCGAGCTTGATG TTGGCTAAGAGCAAGGAGGGGAGGTGATTTTGTGTTGAAACAACCTGGATCCAGCGGATATGATCGCTAATG GCCAGATTGAAACCTTAAAAAATTGGCTATCGCACCCCATGGCTTTATTGAGTTTGTAAAGCGCATGGCGGATT CCTATCTTTAGACGATCCTTTAGAAAAGATAAGGCTCTTAAAGAAATGTTAGGGTTTTTAAAAAATTTTCTTCTGCT TTTACAAAGCGAATACAAAGCCCTTAATCGCTACCTTTTGAAGCGCTTTGATGTTTAGGGATTAGAGAGCGAGT CTCTTTTACGCTTTTACCCCAACAGAAAACCCCAATCGCCTCAAGGTTTGGCATGTTTCTAGCGCGCCCA GTTTGAATTTTAGAAAATTAGTGATCCGCTATCTTTTAGAAGACAGAAAGCTTTGTTGATTTAGCGGTGGGCTATA TCCATAGTGGGGTATT	2350	LQKRGLSLESIAFKLGLCTNRIDYGIE NKGLNKDKLIELGLVKSDNDQKTYLR FLDRIMFPYSPSAQVWVGFGGRTLKEK AAKYINSPQSKLFDKSSLLYG:YHLAKE HIYKQKVIVTEGYLDVILLHQAGFKNAI ATLGTALTPSHPLPKKGDPE:ILLSYDG DKAGRNAAYKASMLAKEQRRGGVILF ENNLDPADMIANGQIETLKNVLSHPMA FIEFVLRMRMADSYLLDDPLEKDKALKE MLGFLKNFSLLLQSEYKPLIA'TLLQAPL HVLGIRERSVFPFYPKTEKFNRPQRF AHVSSAPSLEFLEKLVIRYLLIEDRSLLD LAVGYIHSGVFLHKKQEFDAI:CQEKLD DPKLVALLDANLPLKKGFEKELRLLI LRYFERQLKEIPKSSLPFSEK:MICLKKA RQAIMKLKQGELVAI
HP0276	2351	TCAAAAACCTCTCTTAAAAAACGCGATGGACTAGGGTATTGTCTAACCATGAAGGCTTGCATGCGCAAGATAACGCCA TTAAGCGGAGCGAGTAAATGAATTAGCGGCTAAACCTTTCTTTTGCCTCAAATTGATTGAGCGCTTTTATGTGTA TCTCTTAACCCCATTAATAATGGATTTGCCAGCCAAACACCGGGCTGCAAAAAGCCACCAACCATCCATC AAGGCATACAAACATCCAGCAAAATATCCCTCTCAAGTATTAAACCCCTCAAATCCAGCGGCGCATGCAAGGGGTG ATGCAAGGTTTGGGCTTTGAGCAGCACTTTAGAGCCCTTATTGTTTCTAAGCAAAATGTGGTATTGGGGC TTTGAGCATTTATCCCTTTATATGGTGGGCAAGATTACGATGTGCGCATTTGCGGATTGATGCAAAAAGA TGCTAATGAAGTGATCGTTTGA AAAAGCTTTCCACTTTTCAAGAGCTTGAGCGTGTATTACGGCATGCTGTTAA CGCAGAAGTGCTGAAACTTTAGAAAGAGGTGGA AAAAGGCCATTATAAGCATTTCCAAAACGCTTTGAAAATGCAAA AAGTGGGGCAATCGCTAGGTAGAAACCTTAGCGCTCAAGTGGCTTATGATAAGGCCCATATCGCTAGCGTTAA GGCTAAAGACGTGTTAGAAGTTTGCAGCTCTCGTTCAATTCATTTATCTAGCAAGGACGATTTAGTGCCTTCAAG CAATTAGAGATCCGCACGGAGAAAATCTGCCGATCTGAGCTTTTGTCTTCCACGCTCAATTCCTACCCGGT TTTAAAGACTTTAGAAAATCAGATTCAAATCTCTAAGAAAACACAGAAATTACAGATCGCTAAATCTTGGCCCAAGTG AGTTTTTTTGGCTCTTATATTATGAAGCAAAACAATTCGGTGTGAAGACATGATCCCTAGTTGTTGTGGGCGCTG GCCGGGCGCATGCCT	2352	QKLSLKNAWTRVLSNHEGLHAQEYAIK RASKMKLAALKSFLPQIDLSA'FVVYLSN PIKMDFASQKQPGVQKATNQIHQGIQN IQQNIPSQVLTPQIQAGMQGV:MQGFG ALSSTLEAPLLFSKQNVVIGAL:SIYPLY MGGARFTMVRADLMQKDA'NEVYRLK KLSTFQELSVYYGVMVLNAEVAETLEE VEKGHYKHFNALNMQKVGQIARVET LGAQVAYDKAHIASVKAKDVLEVSQLS FNSILSSKDDLVPSKKLEIRTEKNLPDL SFFVSSTLNSYPVLKLTLENQICISKENT KLQIAKFLPQVFFGSGYIMKQNNVSFE DMIPSWFVGAVGRMPILSPTGRIQKYQ ASKLAELQVSSEIQAKKNMELLVNKT YKETLSYLKEYKSLSSVELAK'ENLKLQ EQAFLLQGLSTNAQVIDARNLSSIVVE QKSVAYKYIVSLANLMA'LSHDIDLFYEF VY
HP0340	2353	TTGCAAAATGCGTTAAAGAGGGGATGTGATCGCTTTTGGCAAATACAAAGGCGCAGAAATCGTTTAGACGGCACGTG AATACATGGTGTAGAACTAGAAAGACATTTAGGCATTTGCGGCTCAGGCTCTTGTGTATACAGGTAATCATGAC CATAACATGCTAAGAGCATGAAGCTTGTGTCATGATCACA AAAACACTAAAACATTAATTAAGGATACAAAA TGCAAAAAGAAATCAAATTTTCAAGTAGCGGAGAAACCTTTTATTGAAGGCGTGAGACAACCTCCATGACGCTGTTA AAGTAACCATGGGCCAAGAGGCGAGGACGTGTTGATCCAAAAGAGCTATGGCGCTCCAAAGCATCACTAAAGATGG CGTGAGCGTGGCTAAAGAGATTGAATTAAGTTGCCGCTAGCTAAGTGGCGCTCAACTCGTTAAAGAAAGTAGCG AGCAAAAACCGCTGATGCTGCCGCGGATGGACGACACGACCGCTGCTGGCTTATAGCATTTTAAAGAAAGGTT TGAGGAACATCAGCGCTGGGCTAACCTATTGAAGTGAACGAGGCGATGGATAAAGCCGCTGAAGCCATTATTAT GAGCTTAAAAAGCGAGCAAAAAGTGGGC	2354	CKCVKEGVDVIAFGKYKGAEIVLDGTEY MVLELEDILGIVGSGSCCHTGNHDKH AKEHEACCHDHKKH

HP0340	2355	TGGATATAAAGCGCGAAGCTTTAGGCATAGAAGTCAAAACGTGAGCGCTTATTCTACAGAAATCCGTAGCCAG CACACTTTAGCGTGGCGTGTCTTTGTTGGGAGGATCAATGATTACGATCGTTATTGCAAAAGCGGGAATACAG TCAAAGCGATCTTTTACGCACATTAGCGATATTAAATGGGCTTATTAAAGGAGTCAATGGGGTATTGGTTT AGGACTATCGGTAAAGAGTCCCAAGCTCGCTCAAGCTTTGGGGCAAGGTGTGTATTATCCCTAAAGATA AAAAGAAGAGTATGAGCGCTTGAGTTAAAGATCTGCTGCAACAAGCGATATTATCAGCATTCATGCTCCTCTAA ATGAAAGCACGCGGATTTAATCGCTCTGAAAGAAATGCAAGCTTAAAGATGGGCGATTTAATCAATGTGGGG CGTGGGGCATTTGTAATGAAAGGACTTGGCTGAAAT	2356	DIKSAKALGIEVKNVSAYSTESVAQHTL ACALSLGRINDYDRYCKSGEYSQSDL FTHISDIKMLIKGSQWGVIGLTIGKR VAKLAQAFGAKVWYVYSPKDKKEEYERL SLKDLLATSDIISHAPLNNESTRDLIALKE LQSLKDGAILINVGRGGIVNEKDLAEI
HP0340	2357	GAGCGAGTGTGTGAGCGGTACTTCTGTAGGCTTAGGGCGAGCCCTAACATTGAGTTTCAGCTAATGACAAA CGGATGCAGGATAATTTAGTGAGCGGTGATTGAAACAGACCAATAAAGGTGCGTATTTAGAAATCAAACTTTA AATCTAGCCAGGATTTAAATGATGCTGTTTGAAGATCCGACACTAAATACAATATCCCGCTTGTGTGAGTAAG GATGGTAATTTAATCATAGGCTTAGCAACATATTTAGCAATAAAGCGATGATGCAATAGTTGCAGAAACC AATCAAAAGTTCAAGCTCTTAACGCCACCCCAACAAATAGCGCAATTAATGAAATACCGGCT GATTATGCGATAGAGTTGCCCTCTACTAACGCTGCAATAGGATAAATCCTTATATGCTCTGATCCCATGTGC CCACATTGCCAAAAGAGCTCACTAACTTAGGATCATTTAAAGAAACACCGTGAGAAATGGTGTGGGGTG GCTTGGGTCAATTCAGCTAAAGCGCTTAAATCCAAAGAAATGGCAAGCTAGGGCTAGGGGAGCGGAGC GTGGAAGATAAGATCTCTATCTTGAAAGATTATTCGA	2358	ASVLSALLVGLGAAPKHSVSANDKRM QDNLVSVIEKQTNKKVRILEIKPLKSSQ DLKMVVEDPDTKYNIPLVSKDGNLIIG LSNIFFSNKSDDVQLVAETNQKVQALN ATQNSAKLNAIFNEIPADYAIELPSTN AANKDILYIVSDPMCPHCQKELTKLR DHLKENTVMVVGWLVNSAKKAAL IQEEMAKARARGASVEDKISILEKIYS
HP0340	2359	ATTTTTCAACGAATACGATCTGACCAAAACGCCAACAGAAAGAGCCTGAGAGTTGAGAAGCCAAATAATATCTA TTTTGATGAAACCCCTAAGGGCGGAGAGATTTGAAAGAATATTGAACGAGGCTGTATTTGCTGGGGAATAA GGAATATTGTCATGCTAAGAATTTCAAAAGGCCCTTTTAGGGCTTTGTGCTGGCGCGTGTGTATTGGGGG AGTGGTGTAGTAATTTAGGAGGCTTTAAAGCAAGGAGCGGAAATGTTAAATAAGGGCTTGATGCGAGCAG GCCAAATCATGTAAACACCC	2360	FFNEYDLTKNANRKEPERLRSQISILM KTPKGREILKEYLNEGCLLGE
HP0340	2361	CTTTAAAGGATTAGAGCGGTACAGAAAGAACCGATGTCAAGGGGCAAGTGGTTATCCAGTGGCTCAAGAAGA GGTTAAAGTTGCTGTTAAGGAGCTTTTAGAGCAGGTGCAAGGCCATTGTGATTGCTTGTGCAATCTCATAAAA CGCTGAAAGCGGAGCGGATCGTTAGAGATATAGCGTTAAAGAGATTGAAATGGGTAAATAATCTCTGATTTCG CTTCTGTGATTACTACCTCAAGAAAGAAAGCAAGCAAGATGAACACCATCTTAGAAGCTTATCGGCTGAG CCAAGCAGGCAACCCCTCTAAAGTCAGCAACCGATTCAAGAGCATGGCGCTAAATTTGATCTTCGTGTGATGCG AACGCATGGAGGCCACCATTAGTTGGAAGCTAAAGAACTCGCTAGGACTATTGTAGCGGCCCTATTGGAGCGGTG ATTGGATCTAAATTGCTAGGCGAAACGCTTGGTTATGACAAATATGATGCAATGATTTGGTGGCAGCGCTTGTGAT ATGGCGCTTATCGTTAAGCAATTTAACATCGCTTACCCCTGATATGGCAGCGCTTGTATCTCTACCGCTT GTGGCTATGATTCTGTTGGCGAGGTGCTGGAGTTTGTGCGCATTTGATCCACACAGCGGATCTGTCAAACTAG GGCTGACAGCGGGGTATAGAGTTGGCACTTGTGGAAAGACAGCGGTTAGACACGCTTTCAGTAACCGATTG CCATATTGTTTAGGCTATTGAAACCGGATAATTTCTTAGCGGTTTATGATCAAAATAGATGTGGATAGGGCTAAAAA ACACATTAAAGAACAAATCGCTGATCCGCTAGGCATTAGCGTAGAAGATCGGCTGCTGTTGATGATTGATGCTTG ATTGGAGCTTAAAGAAATACCTGCGATCCAACATTAGCGCTAAAGGGTATAGCCCATCTGATTTGTGTGCTTTTCAT ATGGTGGCGCAGGACCTGTGCA	2362	LKRIRGVTERTDVKQWVIVPVRQEEVK VAVKELLEAGAKAIVICLLQSHKNAESE RIVRDIALKEIEKLGKNIPVFAVDYYPQ RKESHRMNTTILEAYAAEPSRQTL SKV SNRFKEHGAKFDRVMATHGGTISWK AKELARTIVSGPIGGVIGSKLLGETLGY DNIACSDIGGTSFDMALIVKSNFNASD PDMARLVSLPLVAMDSVGAGAGSFV RIDPHRSVKLGPDSAGYRVGTCWKD SGLDTVSVTDCHIVLGYLNPDPNFGGLI KLDVDRAKKHIKEQIADPLGISVEDAAA GVIELLDLELKEYLRSNISAKGYSPSDF VCFSYGGAGPVHTYGYTEGLGFKDVV VPAAAGFSAFGCACADFEYRYDKSV DIAIPQYSSDKSKIDACKIIQDAWDELTL KVIIEFKINGFSQKDVILRPGYRMQYM GQLNDLEITSFVSKAASVADWEEIVKE YEKTYARVYSESACSPELGFSVTGVIM RGWVATQKPVIPVEKEHGHGATPPKEAKI GVRKFYRHHKVVWDADVWQMEKLLPG NEVIGPAIVESDATTFFVIPKGFATRLDK HRLFHLKEIK

HP0340	2363	TGCCAATATGGTTTGGATATCAAAACGCTCTTGAGGGCGAAACGATCCATCAAAAGCGGGTAAGACCTTGG ATTTGATCGTGGGTTTTAAGAAAGATACCCGAGGATTTTGACGAATTTTAAAGAACTCATCCCAAGA ATACGAGCAAAATCTGATGAGATCAAGCAAAATCTTAAAGAAATCTTAAAGTAAGGCAAGCATGAACCACTTTTA ATCCTCTACAATCCTTACTACCAACAGATGTCATCCACAGCATTTAAGCGTTTACAGGAAATCCCAAGTGGT TTTGGTAAATCCGATCAAAAGCTCAACGATCAAGAAAGCAAGATTCCTTAGAAGAACTACAAAGCCACCAATGAA AAAAATTTTTGCAGCTTTTTGACCGATTACGCTAATTTGTTTGCCTAAGGTGATAAAGTTTCTAAAGATATTG ATGAGAGTTTGATCCCTAGTTATTATAAGAAATAATTTGGAAGTGAAGACTTTTTTATTATCAGCGATTTAAGGGA ATTAGTCAGGGAAGACTTCAGCCTTTTAAAGGATCAATTTTAGCCAAATTTTCATCGCGCCCAACACCACTTACGC CATTATGGGAATAATTATGCTATCCTTTGCGGTGAGTTGAAGAAAGAGCGTTCTTATTTTTTAGCGCATGAAA ACATTATCTGAGCGTGATAAAAGCAAGAATATTTAACCATGCAAGAAATTTTCATCGCTTTGTTTTGAAAAAGG CTTTTTACCTCTACACCTGATAGCATCAATAACATCATTCATGCAGAAATTAGAGCTTTTACAAAGCGAAACGATC TTTTGAATGACTTTACAAGCATCATGTCATACTCCAAACCTTAGAATACGAAATTTATCTTTTCGCTAAAAAAGTT CTTTTAAAGGCTTGCAAAACGATCCAGCCTTTATGATTAGCTTATGAAGTCCAGGAAATCTTACACGCTCAAG GATT	2364	ANMVLIDKNALEGENDPSNIKAGKTLDL IVGFKKEYPQDFDELFE:ILKELIQEYEQ NPDEIKQNLKEILK	ENKITKEEYLKIAKECLEMIENKDRLIKE LELKMERLSNNLRFEE	DKEKERAYAFSSFGMPK(SFNISVSHNR GISALIDAVLSALDLNQII:EQDLADILES LETPNNALEEEIIQVGIIGRVNVGKSSLL NALTKKERSLVSSVAGTTIDPIDETILIG DQKICFVDTAGIRHRGK'LGIEKYALER TQKALEKSHIALLVLDVSAFFVELDEKI SSLADKHSLGIILVLNKNWDIRYAPYEEII ATLKRKFRFLEYAPVITTSCLKARHIDEI KHKIIEVYECFSKRIPTSLNSVINQATQ KHPLPSDGGKLVKYVYATQFATKPPQI SLIMNRPKALHFSYKRYLINTLRKEFN LGTPILINAKDKKSAQQN
HP0340	2365	GCGAGAATAAATCACCAAGAGAGTATTTAAAAATCGCTAAAGAAATGTTAGAAATGATTGAAAAATAAGACAGGC TCATCAAGGAGCTTGAAATTAATAATGGAGCGCCTTTCTAATAACTTGCCTTTGAAGAAGC	2366			
HP0340	2367	ACGACAAAGAAAGAGCGGCTTATCGCTTTTCTTCTTTGGCATGCCAAAGAGTTTAAATATTTCCGTTTCGCACA ATAGAGGCATTAGCGCATTAATTGATCGGATTTAGTGCGCTGGATTTAAACCAATCATAGAGCAAGATTTGGAT GCGGATATTTAGAAAGCTAGAAACCCCTAATAACGCTTTAGAAAGAGAGATCATTTCAAGTGGGCATCATTTGGAG GGTGAATGTGGCAAAAGCTCGCTTTAAACGCGCTCACGAAAGAAAGAGAGCCTTGTCTTAGCGTGGCTGGC ACGACCATTTGACCCCATAGATGAACCATTTCTATAGCGGATCAAAAAATTTGCTTTGGATACCGCTGGCATCAG GCATAGGGGTAAAGATTTAGGCAATTGAATAACGATTAAGACGACGCAAAAGCCTTAGAGAAATCCCATTTG CGCTTTTAGTTTAGCGTGAGCGCTCCTTTTGGAATTTGGACGAAAGATCAGCTCTTTAGCGGATAAACATTTCTT TAGGCATCATCTTGTTTTAAACAATGGGACATCCGCTACGCCCTTATGAAGAGATCATAGCAACTTTAAAAAGGA AATTCGCTTTTGAATACGCCCTGATCACAACCGCTGCTTAAAGCGCGCCATATAGATGAATCAAGCATATA AAATCATAGAAGTCTATGATGTTTTCCAAACGCTTCCACGAGCTTGTCTAATAGCGTGATCAATCAAGCCACCC AAAAACACCCCTTGCCAAAGCGATGGCGGAAATTAGTGAAGTGATTACGCCACGCAATTTGCCACCAACCCCT CAAATCTCTTATAATGAATCGCCCTAAAGCCTTGCAATTCAGTTACAAACGCTATTTGATCAACACCTTAAGGAAAG AATTTAATTTTTAGGCACGCTTTAATCCTTAACGCTAAAGATAAAAAAGCGCCCAACAAATTAATTTTATGCG GTTAAACCCCTTAA	2368			
HP0340	2369	AAAAATGGAAAAATTTGATGCGATTGAGTAACGCTGACTTAGAACGATTAAAAAGCATGGCGAATGCACCTCGCTTTT TGTTGCGGACATGATAGATAAGGCTAATAGCGGGCATCCGGCGTGCTTGGGATTAGCTGATGATGGTGGT TTTAAAGCTTGACCTAAACCTAAACCCCACTAAACCTAATGGCTCAATAGGGATAGGCTGGTTTTAGCGGAGGGC ATGCGAGCGGTAGCGTATAGTTGTGCTTTGTGGGCTTTGATTTAGTTAGAGATTAAAGCGTTTCAGGC AATTACACTCTAAACCCCGAGACACCCGAAATTCACACACCCGAAAGGCAATTTAGATCACCACAGGTCCTTTGGG GCAAGGTTTTGCTAACGCTGTGGCTTTAGCATGGCGAGCCAAATACGCTCAAAACCTTTTGGATAAAGAAAGCCATTT CTCATAAAGTCTATTGCTTGTGGGATGGGATTTGCAAGAAAGGCTAGTTATGAGAGCGCTTCTTTAGCCGGG CACCTTCGCTTGATAACCTCATTGTGATTACGACAGCAACCGATCAGCATTTGAAGCGCTATCAATATTAGTTT AGCGAACAGGTTAAACGCGGTTTGTGGCGCAAAATTTGGGAAGTGTAGAATGCGATGGGCATGACTATCAAGCGA TTCATAACGCTTTAGAAAGAGCCAAATAATCCACCAACCCACGCTTTAATCGCTCATACGATTATTGGTAAGGGG CTGTTGGCTTAGAGGGGAGTGAATAACGCTAGCTCGCTTTAATAAAGAAAGTGTAAACAATCCAAAGAAAC GCTCAATCAATCCTAACGAAAGCTTTATCATTAGCCCAAAACAAATGCAATTTGAAGAAAGTGAAGTTAGGGG GTTAGTTTAGAAGCCTTATGGGAAATACTTAAAGCCCTAAATAAAGAAAGATCCATGCGTTAAAGGATTTGATT TTAGCGCCATCCATTACCC	2370	KNGKI		

HP0340	2371	TGATGAGGTGATGCCAATCCTACCAACCCAGAAAGGTTTTAGCGAAGATTCTTTAGAGAATTAGCGCAATCCAT TAAAGAACATGGTTGTGCAACCGGTTTTAGTGAGTGAGAACGGCGTTACCATTTGATCGCGGTGAAAGGC GCTTAAGAGCGAGCAAAATTAGCTAAATGCCTACGATTAGGCGATTGTTGTGGATATTGAGCAAGAAAAAATGCGT GAAGTCGCT	2372	DEVMPNPYQPRKVFSEDSLEELAQSIK EHGLLPVLVWSENGRYHLIAGERRLR ASKLAKMPTIKAIWVWVIEQEKMEVA
HP0340	2373	CGTTAAGATGAAAGACTTAGAGCGGCTGTGTTATTAAGCTTATATCGTTAAAGAACAGGCGGCGCTTATG ACAATGAAGGCACTAAGCTTGATGAATACGATATTTGAATGAAGCAGTATCAAAATATCTCAGGAAGATACG AAGACAGGGGCTTTGTAGCGCAATGGCGGTGAAGCGATCAAGGATTGTTAGAGAAATTGATTGATCACCTTA TTGCAGAGTTTGAAGAGAAAGTGAAGACACCAATTCTGATCGGAAAAAGAAAAAATCAATTAAGCGTTTGAAGTG GTAGAAAGCTTTTAAATTTCTGGTAATAGGCTGAATGGATGATGCTCACGGTTTACCGGTTATGCCACCGGATTA AGGCCTTTAGTCGCGCTAGATGGCGGAAGTTGCAGTCAGCGATGTAATGATGTCGTCGTGTCATCAATCG TAACCAACGCTTGAACGCTTAATGGAGCTTGAGCGCCAGAAATCATTTGCGCAATGAAAAAGGATGTTGCAAG AAGCCGTGGATGCTTTTATAACGCGCCGAGCACTAATGCGGTTAAGGGCTAACAAAGCCCTTTAAATCG CTCAGTGAATCATTAAAGCAAGCAGGGCGTTTCAAGCAAACTTTAGGTAAGCGCTGGATTTTCAGGCAG AAGCGTATTGTTGGCTTAATCTCAAAATGATGAATGCGGTTGCTAAACATGCGGTTAGAACTCTTCA AACCGCATTTGTTATCCAAAGCTTGAAGAGAGAGGCTATGCCACCGCTCAACAGGCTAAACGCTGATTGAGCAA AAAAGCAATGAAGTATGG	2374	VKMKDLERLVYEAIVVKEPGEAAYDN EGTKLVKMYDILNEEQYQNISRRYEDR GFVAQMGGEAKDLLEIDLITLLQSLK EEVKDTNSDAKKKKLIKRLKVVESFLNS GNRPEWMMMLTVLPVLPDLRPLVALD GGKFAVSDVNELYRRVINRNQRLKRL MELGAPEIIVRNEKRMQLQEAVDVLFDN GRSTNAVKGANKRPLKSLSEIKGKQG RFRQNLLGKRVDFSGRSVIVVGNLK MDECGLPKNMALELFKPHLLSKLEERG YATTLKQAKRMIEQKSNEVW
HP0340	2375	ATTGGGCTGAGCAGAGATAAACTATCAAAATTTAATACCGCTAAATACCTCATTGATAAGGTGGTCCATCCAAAC CTGATTATATTTCTACGCATAGCAATCAGCCCTAGACTTGCTCAAGTTATTGAAAAAACCCAGATGAATGCAAGCG CGATTGAGATCGCTACCTCTCAATCAAGATGATGATCTGAAGCTAAGAGCAAGCGCTTTATGATTAGGA GCGTTGATGCAAGGATCAAGGACTTAAACCGCCACCTTTACAATCTGCAATATTGCAAGGACCATGCGGAAC GGATAAGCTTCTGCTAGGGCGC	2376	WAEAEINYQNFNNAKYLIDKVVQSNPD YISTHESALDCLKLLKKNQMNASAEIA HLLNQDDDLKAKEQALYDLGALYARI KDFKNAHLNLYQLQDHAELDKAASV RA
HP0340	2377	TGTGAGGATAGCAATCCGCTTGCACTACGAAAGCTTAAATCCCAACACAGGAATTGGTATCGCTTTTATTGA CTATTTGCAAGCTCATGTGAGGAGTAAGCCACTAAAGAGCGGCTAGCAAAATCGCTGAATTTCAAGGAGCTTA AAACTTTAGCCAGAGAAATTAGAAATCCCTATCATAGCTAGTGAACCTCAACCGCAGCTAGAAAAACCGAGACGAT AAACGGCCCATCTTCGGATATCAAGACAGCGGGGATGAACAAAGACGCTGATTTGTTTATTTATATAGA GGCTATCTCAATGAGGCTGAAGACACAAATAGACAACTCAAAAGAGGTAATTAAGAGAGCGCA AGAGTTGACTTAAAGTTAATGAAGAAAGCGTATCCCAAGCAAAATGGCAGCATTGAAGAGGCTGAATCATTTG TGGCTAAACACAGGAATGGGCTACAGGAACGGTTATACGCGCTTTAACGCTCTTACCGCTATGAAGACATG GCCATAGATCCCATTTAGAAAGAGGCAAGAACTAAAGTGATATGATAGTTACAACTTGAAGACAAACTT TTCAGGGGGCTTGAACCTTCTACGACCCCAAGAAATACCTGGTGTGGGTTTAAAGCCTTTTATTGGCG ATTAACCTTTATTAGAACTTGAATACCAAAAGCTTGAATTTTCAAAACCTAC	2378	VRIEQIRLQLRKLKSKHKLGIADYLO LMSGSKATKHEHEQIAEISRELKTLARE LEPIIALVQLNRSLNRDDKRPILSDIKD SGGIEQDADIVLFLYRGYIYQMRAEDN KIDKLKKEGIEEAQELYLKVNERRIH KQNGSIEAEIVAKNRNGATGTVYTRF NAPFTRYEDMPIDSHLEEGQETKVDYD IVTT
HP0950	2379	AGAGACTATTGGCGAGGACATTAGAAGCAATATTAAGCATTACAGAAATGTCTCGTGGTATGGACACCCCTAAAG AGTTCTTTTGGAGCGCAATGATAAAAAACAGGAAATGCGATTAAACCGCATAGAACGCAAAATGTGCGGTAAAGC GATGACTTCAACAAAGGATGAACGAAACATTAAAGTTAATACCTTGTAAAGCTATGGCAGCAAGGCAAAAAAGTG AGTAGGACATGATTGCTAAAGTGTGCTAACACCATAGACACCGGATTGCTTCATTTCGCCGACAGA TTTAGCGACACAACTGGCAACATCAGCCCTAGACTATCTAAAGCATAGTTACCGCCATAGAGCAAGCAGAGGGCG TGAGACTGAATTATGCGTTGATTGACAAATCACCTATACTCACTCCCAATATCTTAAGTTTCAATTTTGATATTGAT AACCTTTAAGCGACCAAGTGTGAGAGATTAGTCAATGAAGTCCCAAGAGAACCTTAAATGTGAAGTTGCCA CAATCAAAATGATTGACTTCTCAATCTTTGATGGGCTTACCACTTAAAGTTAAACCATGCTCTTTATCAGCG CAACTAACACGAATGCCGAAAAACCATGCGCTATTAGCCAGTATTGCAACGCTTGTGGCGTTAAAC ATCTTGTTAAAC	2380	ETIGEDIRSNIKALQKMSRGYGHKPEFF LDAMIKKQENAIKRIEARKCAVSDDFKQ GMKRNKVNLLVKAMRQKKVSRLLIA KVLANTIDTDAGYCFISPTDLATQLGNI SPRLSKSVTAIEQAEVRLNYALIDKIT YNSLHNLSFIFIDNPLSDQVFERLVIE VPREALKNVKLPQIKNVLTQSIFDGYH FKS

HP0950	2381	CTTACATGAGGACCGATAGCTTGAATATCGCTAAAGAGGCTTTAGAAAGCGGAGGAATAAGATTTAAAGACATATG GCAAAGACTATTTACCCCTAAAGCCAAAGCTATTCCAGCAAGATAAAAGCCCAAGAGCCCATGAAGCGGATC AGGCCACTTCTATTATTAGAGCCAAAGCTTTAAAGACTACCTTAAGCCTGAAGAAATTAAGGCTCTATACCTTAA TTTAAACACGCTTTTAGCTTCTCAATGCAAGACGCTCTTTTGAAGCCAAAGCGTGTGCTTGGCTTGGAAAAAG GCGAGTTAAAGCGAGTGGGAGAAAGCTCTTTTATGCTATTATAAATTTAGCAATGACGATAAGGACAAAT TGCTCCCAATTTGAAGAAATGACCCCATTAATTAAGAAACTAGAGCAACGCCCATGTTACAGAACCTCCAG CAGCTATTCTGAAGCGAGCTTGATTAAAGTTTAGAAAGTTTAGGATAGGAGGCCAGCCTAGCCCAACG ATTTCCCTTTTACAAAACAGAGACTACATCAAGGTAGAAAAAGCAAAATCAGTCTTTAGAGAGCGCTTTTAAAGGTG ATAGAAATTTAGAAAGCAATTTGAAGAAATCGTGATTCAAATTCAGCGCTTCTTTAGAAAGAAATTTGGACAATA TCGCTCAAAATAAAGCCGACTACCAGCAAGCTTTAAAGGACTTTTACTACCCCTTTATGGATAAAATTAAGCTGGGA AAAAGAAATATCATCTCTCAAAAGTGCATGAAAAACCGGCTCAATCATGCCCTAAATGCGGTGGGAAATTAAGTCAAAA AAATAGCCGTTATGGGAGTTTATCGCTTGCAACAATACCTAAATGCAAAATATGTCAAAACAATGAAAGCGCTA ATGATGAAGCCGATCAAGAAATTTGTGCGAAAAATGCGGAGGGAAATGTCGCAAAATTCAGCAGAAACGGGGCGTT TTTAGCTTGCAA	2382	YMRDLSLNAKEALEEARNKILKDYGK DYLPPKAKVYSSKNKNQAQEAHEAIRPT SILEPNALKDYLKPEELRLYTLIKRFL ASQMDALFESQSVVACEKGEFKAS GRKLLFDGYKILGNDIKDKLLPNLKE NDPIKLELESNAHVTEPPARYSEASLI KVLESIGIRPSTYAPTISLLQNRDIK VEKKQISALESAFKVIEILEKHFEIIVDS KFSASLEELDNIAQNKADYQQVLKDF YYPFMDKIEAGKKNISQKVHEKTQS CPKCGGELVKKNSRYGEFIACNNYPK CKYVKQTESANDEADCIELCEKCGGEM VQKFSRNGAFLACNNYPECKNTKSLK NTPNAKETIEGVKCEPCGGDIALKRSK KGSFYGCNNYPKCNFLSNHHPINKRC EKCHYLMSEIRYRKKAHECIKCKERV FLEEDNG
HP0950	2383	TATGCATTTTTATTGCATAATGAAGGCAAGAGATGTGTATGAAATTAGAGAGCGCATGAAAGAAAGTCATGGATGA AAAAGTGGCGTTTTTAGAGAGGCAAGGCTAGAAAGCCCTTAAAGAAATGCAAGAGCTTTATGCACGCTCCA AAAACATTTGCGTGAAACAAAGGTTTTACAAATACCCCTGAATTAGAGACGCTTACCGCACCACCAAAATGCTCA AACTCGCGCTTTGTATCACTCAAGGAGCGTTACTGCGCACTGAAAGCAGAGGGCTCACACAAGGATTGACTACCC TAAAGAGACGATGAAAAATGGCTTAATCGGACTCTAGCGAGCTGGCTAGCGCTGAGCAAGACATGCCACGATT GAATACGAAGAAATTAGATGTGATGAAATGGAATCAGCCCTGATTTAGGGCTATGGCAAAAGGGTAATTCATC CCCCCCCCAAAAGAAAGAGCGGACGCTGAGATTTGAAAACGATTTTAGAACTAGAAAGCTTGGAAAAGACAG AATAGAAGTCCAAACATCGGCTCATGCCCTTTGAATTGCAAGAAAAATACAAGGCTAGGAATATGCGTTTAGAAGATGA GGAAGTCAAGGCTAGGGGGGAACATTTGTATCTTCAATGTCCATGAGTTATTGAGCAACACACAAACGCTAAACCTAA AAGGAGAACACCATGAGTGATAATGAACGAACGATTGTAGTGTAGAGTCTAAATTTGACCCCTCAAGCGCGGTGAG TAAGCCGCAATTTAAGAGTATCAGTTGAAGAAACGCCATCCATGACGCTTTTATCGCTTGAACCTCATTAGAGA GCATCAAGATCCGATTTGATTTTGTGTCGCGCTGGGATTTGCGGCTCTTGCSCGATGATGTTAATG CTTCTACCGGGTTAGAGAGCCTGATAAATGCACAAAGAGTTTTAAAAATCCGCTCTCATGCTATGACTTAGCGGC TAGGTTATTTGTTAGTAAAGATAAGCAATACGGCTTAAAGGCTATAGAAATTTAAACGCTTGGCTAAAGAGCTTC AAAGCTGGATACCTTATCAGAGCGAGGATAATATCAATTTTACATGCTTATGAACATGCTTATTGTTTGTCAA AAAGCGTTTCTAGCCCAAGATATGAAGATTTTCAATTAAGCGGATGCGCCAGTATTCCTCAATCAGCTCTTAACACTAA CCATGGGCGTGGGCAATCTTTTGTAGTGTGAGTTCTGCGTAGCGTATGAGCGATAATGCCCTTTTGCACATAGCG CTAATCGGTGGCAGGAGTGGTGTTTAAAGCCATAGATGAGAAATGGGTATTGCTAGCGGATCAGCTCTTAACACTAA TACGAGCGATTATCATGGCGGCCCTACAAAGGCGATTAAAGGGATAGCTTATACCAATTTCCGCTCTTCTGCGCTAA CCATATCAGCGCAATTTGCTTTTGAAGACGGGTATGATTTGTGGGTAGTGGAGCTGGGAAAGGCTCTCTGTGGC GTATAACAAAGTTGCAACATGATTTTAAACCTGAAACTTCCCTTATTCCAGCCTAACCTTATCGGGGTGCATAA CAACGCTATTTCATTATTTAGCCA	2384	MHFLHNEGKEDVYEIERMKEVMD KVGVFREGKRLLEEALKELELQELYARSKN ICVKNKVLHNNPELEDAYRTTKMLKLA LCITQGALLRTESRGAHTRIDYPRDD EKWLNRTLASWPSAECIDMPTIEYEEL DVMKMEISDFRGYKKGKGNFIPHPKE ERDAEILKILELEKLGKDRIEVQHALM PFELQEKYKARNMRLEDEEVRAAGEH LYSFNVHELDDQHNANILKGEHHE
HP0950	2385	CTTCTACCGGGTTAGAGAGCCTGATAAATGCACAAAGAGTTTTAAAAATCCGCTCTCATGCTATGACTTAGCGGC TAGGTTATTTGTTAGTAAAGATAAGCAATACGGCTTAAAGGCTATAGAAATTTAAACGCTTGGCTAAAGAGCTTC AAAGCTGGATACCTTATCAGAGCGAGGATAATATCAATTTTACATGCTTATGAACATGCTTATTGTTTGTCAA AAAGCGTTTCTAGCCCAAGATATGAAGATTTTCAATTAAGCGGATGCGCCAGTATTCCTCAATCAGCTCTTAACACTAA CCATGGGCGTGGGCAATCTTTTGTAGTGTGAGTTCTGCGTAGCGTATGAGCGATAATGCCCTTTTGCACATAGCG CTAATCGGTGGCAGGAGTGGTGTTTAAAGCCATAGATGAGAAATGGGTATTGCTAGCGGATCAGCTCTTAACACTAA TACGAGCGATTATCATGGCGGCCCTACAAAGGCGATTAAAGGGATAGCTTATACCAATTTCCGCTCTTCTGCGCTAA CCATATCAGCGCAATTTGCTTTTGAAGACGGGTATGATTTGTGGGTAGTGGAGCTGGGAAAGGCTCTCTGTGGC GTATAACAAAGTTGCAACATGATTTTAAACCTGAAACTTCCCTTATTCCAGCCTAACCTTATCGGGGTGCATAA CAACGCTATTTCATTATTTAGCCA	2386	STGVREPKCTKSFKKSALMSYDLALG YLVSKNKQYGLKAIEILNAWAKELQSV DTYQSEDNINFYMPYMINMAYWVFKKA FPSPEYEDFIKMRQYSQSALNTNHG AWGILFDVSSALALDDNALLHNSANRW QEWVFKAIDENGVIASAITRSDTSDYH GGPTKGIKGIAYTNFALLALTISGELLFE NGYDLWGSAGKRLSYAYNKVATWIL NPETFPYFQPNLIGVHNNAYFIILA
HP0950	2387	AGAGTTGCAATCTTTTATTGAAAAGCGCTAAAGCCCTATCAAAACTATATTAAAGATCTTAACATTTGGTAGCATTGAC GGCATTATAGAGGGGCAATTTTCATCTCAAAAGCGGTGCAAAATCCCTTGAATACGCCATTTATTGCCACTGCCT TCCTTTATTACGAACAAAGCCTTTTAAAGGTATCATCAAGCGTTTTAGAACCATCTCAAAATAAGGACGCCATAATCA TGGCAGAAAAACAGCTAACGATTTAAACCTAAGTAGAGATAAAGCTCGTGATTTTCGTTATTTATGGCATGCAAGAGG GCGTCCCTTATGAGGGGATTTATGATCAATGTTGCTAAAGTAAAGTCCCAAGAAATCATCCCATGCCACCTTTTGAAT ACCCACGAAATTTGGATTACATTATCGGCGTGTGATTGCGCTCCATAATCATTCGCT	2388	ELQSFIEKRLKAYQNYIKDLNIGSIDGIE GHFHLKSGAKIPLNTPIYCPSPSYEQ SLFKVSSSVLEPSQNKDA
HP0950	2389	GTTTGTCTTAAAGCGTTTGAAAAATCTTAAAGGCTCAATGTTAGAATTGCAAAA	2390	FALKRLKILKAQMLELQIK

HP0950	2391	GGGATTATGATGAACCGCTTTATTATCAGCGTCGTGGCTAAATCTTAGCGGTGCACCCCTCAACCTTGCGCCAA TACGAAAAGAGGGTTGATAGAGCCTAGCAGGACTGATGGGAAATGCGCTTGATATCCCAACGAGACATGGACA AAATCAAAACGATTTACGCTTACAAAGGATATGGGGTAACTTGGCGGTGGATATTATCTTGGTTTAAAG AAAGCTTGATGAATTAGACAACCTGAATAAGAGTTCGAAGCGCTGCACAAACACTCTAAATACCAAAACCC CAACGAAAATTTAAACACCCCTACGAATTTTACGAATTTGATTTTAAATGAGCCTGACTTCGCTTTTAAAC CCAAAAGCCTAGAGATTTTATAGCCCAAGAGCATTTAGTAGGAAAGACGCCCTTATTAAAGCCCTACAATCC AAACACTTCCCCCATGCCCTTTCTATGCCCTCCTGCGGTGGTAAACAGCCCTGGCTCAATCATCGCCTATAT GCTAGAGCGCCCATTCCTTTATCAATGCGACGGATTTAAATAGAGGATTTGCGCTTAAGCTTAAATATACCA AAATACCCCTTTAAACCCGTTGTTTTATTGATGAACCCACAGATTGAATAAACCCCAAGAAATTTTACTCCCC ATTATGGAAGAGATCACGCTTTAATTTAGGGCTAGCACGCAAGATCTAATTACAGCCTAAGCCTGCGATCCG ATCAAGAAATTTTATTTGAATTAACCCCTTAAACAGAGCGATTTAGACAGGCTTTGCGCTAAAGCTTTAACATTG CTCAAAACAAATAGAGCCTGGCGCTAAACCTATCTTTTAAACAAACAGCGCTGGCAGCTAGAGCGTTATTA CCTTTTAGATTTGAGCGCTAAATAGAAGATCCTATCACTTTAAACAGCTACAATCCTTAGCGCTCATAGCCTAAAT GATGGATCTTAT	2392	DYDEPLYLSVAKILGVHPQTLRQYEK EGLIEPSRTDGKMRLYSQRDMDKIKTIL RLTRDMGVNLAGVDIILRLKEKDELNDN LNKELQDALHKHSKNKTPTTKNLNLTPT NFYELILFKK
HP0950	2393	ACCTAAACCCATTGTCAATTAAGAAGATGACAGGCTAAAGACTTTAGCTCTTCCAGCTCACACTAGTACCCCTGA AAAAATCCATTCTTGGAGTTATGGGAAGTTAAAGCCAGAAACGATCAATTATCGCACCTAAACCTGAACGAGA CGGCTTGTTCATGAAATCTTTGGCCCACTAAAGATTATGAATGCTTGTGCGCAATACAAAAAGCCTCGCTT CAAGACATTGGCAGATCGGAAATGCGGCTGGCGATCAGCACTCCAAAGTCAGGCGTTTGAATGGGCGAT ATTGAATTGGCACTCCTGTAGCGCATATCTGGTATGTTAATCTTGCCTAGCGCTATCGGCGCTTTTAGCGCTT AAGATGAAGACTTAGAGCGCTTGTGTTATTAAGCTTATATCGTTAAAGAACCGAGCGGCTTATGACAA TGAAGGCCTAAGCTTGTGATGAATAGGATATTTGAATGAAGAGCAGTATCAAAATATCTCAGGAAGATACGAAGA CAGGGCTTTGTAGCGCAATGGCGGTGAAGCGATCAAGGATTTGTTAGAAGAAATGATTTGATCACCTTATTGC AGAGTTGAAGAAGAGTGAAGACACCAATCTGATCGGAAAGAAAGAACTCATTAGCGTTTGAAGTGGTA GAAAGCTTTTAAATCTGTAATAGGCTGAATGGATGATGCTCAGGTTTACCGGTATTGCCACCGGATTAAGG CCTTAGTCGCGTAGATGGCGGAAGTTGCAAGTCAGGATGTAATGAATGATGCTGTCATCAATCGTAA CCAAAGCTTGAACGCTTAATGGAGCTTGGAGCGCCAGAAATCATTGTGCGCAATGAAAGAGGATGTTGCAAGAAG CCGTGGATGTGCTTTTGATAACGGCGCAGCACTAATGCGGTTAAAGGGCTAACAAACGCCCTTTAAATCGCTC AGTGAATCATTAAGGC	2394	PKPIKEDDRPKDFSSFLTASPEKI HSWSYGEVKKPETINYRTLKPERDGLF CMKIFGPTKDYECCLCGKYKPRFKDIG TCEKCGVAITHSKVRRFRMGHIELATP VAHIWYVNSLPSRIGTLLGVKMKDLER VLYEAYVKEPGEAAAYDNEGTCLVMK YDILNEEQYNISRRYEDRGFVAQMG GEAIKDLLEEIDLITLLQSLKEEVKDTNS DAKKKKLIKRLKVESFLNSGNRPEWM MLTVLPVLPDRLPLVALDGGKFVSD VNELYRRVINRNQRLKRLMELGAPEIV RNEKRMQLQEAVDVLFDNGRSTNAVKG ANKRPLKSLSEIKGKGGRFRQNLGK RVDFSGRSVIVVGNLK
HP0950	2395	AAATCATTTCTAAACCGCAACATAGAAATCCAAGACTTGAAGCTCAATCGTGGCAATTTGAGCATGATCAAAAT TCTTGGTAAAGTTAATCCAAGAAACAGCCAATACATACCTGTTTGCATCAGAAAGAAAGCGGATCAAAACCCACC AAGCAAAATCGCAAGACTTCAAAAGATTTAGAAGAACTCACACAGCATGTGCAACATCAATCAATCTTGATAAAT TGTTAGAAATGGAGGACTATTCTAGTGCCATGATTATAATATACAAAGATGATAACCCAATATATGTTGTTAA GAGGATGCTTGATAACCTTGATAGCTATAAATATGAATCAGACGAGCTGTAGACGTGCCATATGAGAAGCTATTGG AAATAAGCATTGCTATTGAAGACACTAAACCCCAAGACTACCTTATATCAACCTTAAAGAACTCAAAAAATTAAT AGATAGTATTATTGATGATCATGTTTATATGGCCGATGGCTTTTGAATGAATATTCTAATAGGATCAAAAAAGGT CTCCAAATCCTTGCTAAACTAAATCCATGTGGCTAGGCTAGGAAATTTTATTCGCTCTTTGAAAGAGGCTATC CCAAGGCATGCCAAAGAGTTACTGACAAGATGATTAGCTCTGAAGAAATCTATCAAGCCCAATCAAGTCAAACTC ACTGAAGCGAAGCAAGATTTGACAAATGGAAGAAATCATTAAGATTTAGAAAGCAAGAAACACCTTATCAGTG TATTTAAATTTGGAGAAAGTTTACAGCGCATTTAAGTGTCAAAATCTCATAGAGTTGGAGTCAAAACCGATAAA GGCTCCTGGACTTTCAACTTTAACAGATAAATCAGGCAATATGGCAATAGCACAGACAGCAAAATCCTTATAG AAGAGCTTAAATCTTGAGGGCGTTATCAACAGAAATGGCGCAAAATTCCTTGGAGTGCAAGAAATGGACACTCGCG CTCGCTGTG	2396	IISKTDNIEIQDLKLRGNCEHDQNFV KLIQETANTYLFASEKEKAIKNHQAKIA RLQKDEELTQHVQSSNLDKLENG GLFVSGHDYKYTKDDNPIYVVKRMLDN LDSYKYESDDVLDVPEYKLEISIAIEDT KNPKDYPYNLKLKLLIDSIIDHDGYMA DGFLNEYSNRVSKKGLQILAKLSMWMP SVGKFYFASLKEAIPRHAKEVTDKMISS EEKSIKANQVKLTEAKQDIDKMEIKIDL ESKKNLTVLYLKFGEFTAHYKQCNLI EVGVKTDKGSWTFNFR

HP1247	2397	TATCCAAGCTGGATTGAAAGACATTTATGCGTTTTTAAAAAATTTAGACAAAGAAAATTTTGATTCAGAGAAAAATCA GAGGAAAGGATTGAAAGCCTGTTAGAGAGCGTTAAACAGGCATAGATCCCTTAAACGAGCAAGAAATGCAAGCC TTTGATTTAGCGGATCAAGGCTAACAGCTCTTATTACAAGCTCAGCTATAATCTTTTACCCCTGCTTTTAAAGCCTTTTAT CCAAAAGAAAACGCCATGATTGTAA	2398	SKLDLKDIAFLKNLDKENFDSRENQR ERIESLLESVNRHKIPLNEQELQAFDLAI KANSSYYKLSYNLLPLLSSLLSKKKTTP
HP1247	2399	AGAGTTTAGAAGTTTATAGACAAGCATTATAACCACTCTTTTGAGCCGCTAGAGGTTTAGGCTATATTTATGCGTTA TTGTATTTCCCAAACTACCGCAAGCGTTATGAAGACTTCTTAAACAGGATTACCTTAAATCCTTTTACAAACAATA AAGATTTGTTAGGCTTTAAGCCTTTTAGGATTGAACCTAATCGGCTTGCTATTAAGCAAGAAAGCCTGAATT ACAGCTTTGGAATAATTAAGAGACGCCACCATAGGGAATCCTGCTATAAGAGAGACATAACCCCATCATCAAAAAA CCCTCTCATACGAGCCAGACCAACGCTTTATATCAACCATAGCGCTTATTTAGGGGGTGAGTCAAGAAATTTAT GATTATAGAAATAGGGGGTATGGCGTTTAGACAAATATTTAAAGCCATAAAACGAGCCTTGCGACTTTGATCAT GTAACATAATCATTAAGTATCGCACGACGATTGAATCCAAAACGCTTGGAATTTTAAACGAGCGATTTGCCCC CATTAAAGGGAATGACAGCAAGCCTTAATGCAAGAAATCTTGCAAAATCCACCCCTCCCCCATTTAATAC CAATATCGCCCTTA	2400	EFRSFIDKHYNHSFEPLVLYIALLY SPNYRKRYEDFLKNDYPKILFNNKDL FRALSLGIELIGLHVLNQESLNYSFGK LKDATIGESCYKEEHNPIIKPSSHNEPD QRLYNHSAYFRGVSQEIYDYRIGGYG VLDKYLKSHKNEPCDFDHVTNIKVIAR TIEIQTGLFGLTSDPLHLKGNDISKALMQ EILQNPPPPPI
HP0951	2401	ATTTACCCCTTAAAGCCAAAGTCTATTCCAGCAAGAAATAAAACGCCCAAGCCCATGAAGCGATCAGGCCCACT TCTATTATTTAGAGCCAAACGCTTTAAAGACTACCTTAAGCCTGAAGAAATTAAGGCTCTATACCTTAATTTACAAAC GCTTTTAGCTTCTCAAAATGCAAGACGCTCTTTTGAAGCCAAAGCGTGTGCTTGCGAAAAGCGGAGTTT AAAGCGAGTGGGAGAAAGCTCTTTTGTAGTGGCTATTATAAAATTTAGGCAATGACGATAAGGACAAATGCTCCCC AATTTGAAAGAAATGACCCCATTAATTAAGTTAGAAAACCTAGAGCAACGCCCATGTTACAGAACCTCCAGCAGCTAT TCTGAGCGAGCTTGATTAAAGTTTAGAAAGTTTAGGCTAGGAGGCGCCAGCCTACGCCCAACGATTTCCCT TTTACAAAACAGAGACTACATCAAGGTAGAAAAGCAATCAGTGTCTTAGAGAGCGCTTTTAAAGGTAGATAAAAT TTTAGAAAAGCATTTGAAGAAATCGTGGATTCCAAATTCAGCGCTCTTTAGAAAGAAATTTGGACAATATCGCTCA AAATAAGCCGACTACAGCAAGTCTTAAAGGACTTTTACTACCCCTTATGGATAAAATTAAGCTGGGAAAAGAA TATCATCTCTCAAAAGTGCATGAAAACCGGTCAATCATGCCCTAAATGCGGTGGGAATTAGTCAAAAAAATAG CCGTTATGGGAGTTTATCGCTTGCAACAATACCTAAATGCAAACTGCAAAAGCGCTAATGATGA AGCCGATCAAGAAATGTGCGAAAATGCGGAGGGAATGTTGCAAAAATTCAGCAGAAAACGGGCGTTTATAGCT TGCAACAATACCCCTGAATGCAAAAACACCAATCGTTAAAAAACACCCCTAACGCAAAAGAAACAATAGAAAGCGGT GAAATGCCCAAGATG	2402	LPKAKVYSSKNKNAQEAHEAIRPTSII LEPNALKDYLKPEELRLYTLIKRFLAS QMQDALFESQSVVACEKEGFKASGR KLLFDGYKILGNDKDKLLPNLKEND PIKLEKLESHNAHVTEPPARYSEASLIKV LESLGIGRPSTYAPTISLLQNRDYIKVE KKQISALESAFKVIEILEKHFEIIVDSKF SASLEEELDNIAQNKADYQQVVKDFY PFMDKIEAGKKNISQKVHEKTGQSCP KCGGELVKKNSRYGEFIACNNYPKCK YVKQTESANDEADQELCEKCGGEMV QKFSRNGAFLACNNYPECKNTKSLKN TPNAKETIEGVKCEPCGCGDIALKRSKK GSFYGCNNYPKCNFLSNHKPINKRCE KCHYLMSEYIRKKKAHECIKCKERV LEEDNG
HP0951	2403	GCACGATTTTAAAGGCTTATAAACATAGTCTTGGGCAAGAAATCTAAAGATTTTATTGAAGATAGTATTATGACAGATA CGATAAAGAAAAGAGCGTCTGAAATCTTAACCGCTCAAAATTACAATAGTATTTTGAAGAACACGGTGTTAAACCAT TTGGAGTTTGAAGACAACATTAAAGAGCGAGTTGAATAAGAAATTTGAAGAAAACACTTATTTGCGTAACGCTTATT ATTTCAAGGAGCTATTGAATGAGAGTGTGGAATGTTCAATAAGCGATATTGATGATTTTGCAAGTGGTTTTATG AACACATTGTTTGACCAGGATCTTTGTTTGAAGCAAGACAGCGGATGCAAACTTTCAAGTGTAAACGACAGAG GCCAACCCCTTAAGCCCTATTGATATTTTAAATCCAGTTTAAAGAGCGTTGAGGCGTGGATATTGATTAGAAAGCGTAAGG ATTTTAAACCACTTGGGACAAATTTGTTGAAGCTTGAAGAGCGTTGAGGCGTGGATATTGATTAGAAAGCTTTT TTAACATGTTTGAATACGCTGATCCTAGCACTCTATGAGATCAGCGAGTTTATGAAAGCGCTTACCGCATTTGCTCAAAAG ACAGCAAAAAGACGCTTGGGTTTATGAGGTTTATGAGATCAGCGAGTTTATGAAAGCGCTTATACCGCATTTGCTCAAAAA CAAGACCGATACGCTATTATTGAGGTTTATGAGGTTTATGAGGTTTATGAGGTTTATGAGGTTTATGAGGTTTATGAGG AAATACCCCTGATTTGACGCTTTGAAAAGCTTTTGGTGTCTTATTATACCAAACTTGGATTGAGGAGGACGATC ACGCGCATCAAGCAAAACAGTATCAACATTATCAAAAACGTTTAAAGCAATAGAGCGTTGAAAACCATCAAGAGCTT ATATTGAATAGCATCGACTCTTATAACACCTTTGATCAATACCTCTATACCTTATGGGATAGCTCTTCTGTTTATCATA GCAAAATG	2404	TILRYKHSLGQESKDFIEDSIYDRYDK EKERLKLTAQNYNSIFENTVNLHLEFE DNKKSELNKKFEENTYLRNAYYFKELL NESVENGSDIDDFVKWFYEHIVLTRII CFEQDSAMQIFQVLDNRGQPLSPIDILK SSLMQEIQDSEKROFITTWDKLVEA CKSVGVDDIDLEFFNMYLEYADPSTS KKRADKGLKKVKFKDSKKDACGFIYEIS EFMKAYTALLKKQDRYVYLLRYLPSRY WASILTALVYKYPDFDALKLLVSYYY QTWIAGGTTRIKQTSINIKNVKSNKSV ETIKELIINSIDSYNTFDQYLYNLWDSS SVYHSKWVRPVLALAN

HP0951	2405	CTTCTGCTATGAAGAACGAAACGATTGGAGCGGGGATCTTAAAGGTGTGTGAGAAAATCAAAAGCGCACTACCC TTTGGGATCATCTCAGCCTTTAAACCTTTAAAGACGCTTTTACAGAGATTTCAATCATATGAGCAAAAGTTACTGA TAGGGGAGCTAAAGCGGTGCTCAATCTAGCGCTGATAAAGCTGCTAGTTAAACGCGCTTACTACTG CAAGACAAATCTGTTAAAGTGGATTGGGATAACCCATTTTAAATCAAGGACTTCTTTAAAGGCAATAATTACCTTTATA GGAGGTTTGTGTTTATTTGGGAAGCATTTTATGGACAGATTTTAAAGAAATACGCTAAGCGGAGCGTGAAAGACT TTATGCTAGTAAGGAGTTTGTGCTAATACCGATACACCCCAAGCAAAATACAGAAAGAGCGGAAAGCTGCA TCGTATTTAGAGAAATAGCGGATTTTATAGGTTTGTCAAGCGCTTAACTCTTTAAAGACAAACCGCAAGATCCT TTTTACCCAATGAAGAAACGAGCTTTTGGTGTGCTAATGAGCCTACTATCGTGTAAATTTAAGGGATTATTTAT TGGTGTAGCGCAATCTTTAACCAACAGCGATCTGTTATTGTGAAGCAATGCCCTAT	2406	SAMKNETIGSGLKKVCEKIKSALPFGII SAFKPFKDAFYRDFNHNQKLLIGA SGCIQSSADKLAQLKTRLLYWQDKSVK VDWDKPIKIDFFKGNLYLRRFCFL GKHFMDRFLKNNAKASVKDFMSSKEF VAKYRTPKQNTERRAKKLQSYLENKR DFIGVQALNSLKDNPQDPFLPNEETS FLVFANEPTIVFNRLDYLLVLAQIFNQ AICYCESKCP
HP1489	2407	GTTGTATGCGTTTGAGAGCGGTAATGAAGAAATTAAGAAATCGCTTCTAGCATGTTAGAGAAAGAAAGATTAAAA CAACCAACTCGCTTTTCGCTTTAAGCCTTTTAAAGCGTTTAAAGAAATCAATGAAATGACGCCCTCATCGAGCC GCATTTAAAGACTGGGATTTCAAGCGATTAGGAGCATGGAAGGCGATTTACGCTTAGGAGCGTATGAAATTG GCTTACGCCCGCAACCCCTATCATCAATGAATGCATAGAGCTTGGCAACTCTACGCTGAGCCTAACACC CCTAAATTTTAAACGCTATCTTGGATCTTGAAGCAAAAGCTCACTCAAAACCCCTTGAATTGAGGCTGTTTATAC CTAAATTTAAAGAAATGATGCTATATCACTAATCACTAATCACTAATCACTAATCACTAATCACTAATCACTA ATCACTAATCACTAATCACTAATCACTAATCACTAATCACTAATCACTAATCACTAATCACTAATCACTAATC ACTAATCACTAATCACTAATCACTAATCACTAATCACTAATCACTAATCACTAATCACTAATCACTAATC	2408	LYAFESGNEEIKKIASMILEEKIKNNQ LAFALSFLNGVLEKINEIDALIEPHLKDW DFKRLGSMKAILRLGAYEIGFTPTQN PIINECIELGKLYAEPNTPKFLNALDSL SKKLTQKPLN
HP1489	2409	CAATCCCTAAAGACAGCGGTGTTGGCTAAAGAGTCCCTCTAGCGCTCGGTGATGCTCAAACTCAAGCCTGAC ATGAAGCTTTCACCCACTCAAAATTTAGGGATTAAATTTAATCGCTGAGCTGCTAACTCACGATAGAAAT GTGAAATCGTGAATGAAATGGCGAATCAATAGCGGAGGATAGTAACTCAAGAACTCAAGAAATAGCCCTAGA GCAATTGCATTACAACAAATTTGAAACATCTAGAAATAGATTGCTAATATCTTAGCCCTATTGTGGGGGT AAAACAAGGTGTTGCAAGGGTCAATGAGATTGATTTCAGCCAAAGAAAGCACTAAAGAGACTTTTGATCC CAATAATGTCTAGGAGCGAGCAAAATTTAGAGAAAGAAAGAGCGCTTCTAAAGCAAGTGGTGGCGTGC CTGGGTTGTGAGCAATATCGGCTGTGCAAGGATTGAAGACAAATAGAGCGCAAGAAATAGCAAAAGCTCAA AACACAACCAATTAAGTGGTAAACCATAGCGGATTAGCGGAGTTAGCGGCTTTAGTGGCTTTGATGC GGCGTTGTGGTGGATGGCAAGTATAAATCGGCTTAAAGATGGGTAAACACTTTAGTACGAGCTTTGAGC GATGAATCGCTTCAAAATCAAGCTCTAGTCAACAGCCATTGGCTAATCAAAATAGAGCGGATGATGGC GGTGAAGCAATTTGAGTTTAAACCTATGACCTGTGATTGATAACGCTTCTAGCGGAAAGAAATCATGCACAAAC TCAAAATCTTAGGCTCATTCACGCCCTTAATCAAGTATATTTAGTGTATAGTGTCTTTTCTATAAAAG TGATTGCGCTTTCAGCGAAGCATGCTAGAGTGGTGCCTGATGAAGATAAGGAAGTGAATCCATGTTTGAAGAA ATGGATGAAGAAAGA	2410	IPKDSVFAKEVPPSASVMLKLPDMK LSPTQILGIKNIILAAAVPKLTENKIVNE NGESIGEDILENSKELALEQLHYKQN FENILENKIVILAPIVGGKKNVVARVNA EFDFSQKSTKETFDPPNNVVRSEQNL EEKKEGASKQVGGVGVVSNIGPVQ GLKDNKEPEKEYESQNTTNYEVGKTIS EIKGEFGLVRLNAAVAVDGYKIALKD GVNTLEYEPLSDESQKINALVKQAGY NQNRGDDVAVSNFEFNPMAVIDNAT LSEKIMHKTQKILGSFTPLIKYLVFIVFI FYKKVVPFSERMLEVPODEKVKSM FEEMDEEDELNKLGLDRKKVEDQLG LNASFSEEEVRYEILEKIRGTLKERPDE IAMLFKLLI
HP1489	2411	AATGATCGTGGAAAAACAAAAATTAACACCCCAACAGAAATCCAAACATGCAATCGGCTCCAAAAAATAACGA AATAATCAAGCTCAAAATGAACGCAAAACGCTCTCTTAGAAGCGTTAAAGAAATAGCTTTGAACCGAGCGTTACTCT AAAAACAAATGAAATGCTTCTCAAGCTCTAGGAAGTTCTCTGACAAAGCTCAATACATCGCTTACAAATACGAT TGGTATCAAGCGCTTGAAGAAACCTTAAAGGTTTGAACATGTTGAAAGTGGCTATGCAAAAGCGACCTTAT TGATTATAATCCCTAACGGGTGAGGCTTTGTTTCAAGTGCCATCTATGCGCTGCTCTAGTTTTCAGCATG GGTGCACCATTTGGAATCATTTGAACATTTCACTCTAGCGCCCAAAATGCCCCTATCTTGATGGCTAAAAATTTCA GCATGCCCTTATGAACAGGTTATTGAGAAATACAGAAATGATTGTAGCCCTTATTCAAATAACTGAGTATGAGAT TTTCAAAATATCGCTTATTGAATGGATCAATGGAGAAATCAAAACCTTAAAGGATCAGTAGATTGAACGCGCTC ATAGAAAGTTGCTATCTTAAACGCGAGAAATCATTTAACTATATAGAGAACTTGAAGAAAGCGGCTTTGGGAA GAACAACTGAAATTAGAAAGAGAAACGACAGCAAGAAACATTGCTAGCTTAAAGTTATTGCTCAATGAAACACTCG TGAAAAATACCATATCTCTTTTGTCTGTCTGTTTGTGCGGAGAGATATAACAGCGGTTTAAAGCAACTGGA TAGCACCTACCAAGAGAGACCAACCAAGTGTCTCAAAACCTTAGATGAGATTTTCAAGCACTAGCCCTAGTGCTAA	2412	MIVEKQKINTQTEIQNMQIALQKNNEIK LKMNQNALLEALKNSFEPSTLKTQM EMLSQLGSSSDNAQYIAYNTIGIKAFE ETLKGFTWLKVAMQKATLIDYNSLTG QALFQSAIYAPALSFSSMGAPFGIET FTLAPTCKPYLDGLKISACLMQEQVQNY RMIVALIQNKLSADQFNIAIYLNINGEI KTLKGSVDNLALIEVAILNAENHLYNIEN LEKKADLWEEQLKLERETARNIASSK VIVK

HP1489	2413	GAATGGGGTGAGATTGTAGGGTTGGAGCATTGGATAAAGTGATTTATAGATCAAGCCCCCATAGGCAAAACCC CACGAAGCAACCTGCCACTTACACGGGAGTGATGAATCAAGGATTTATTTGCCGAGCAAAAGAGCTAAA ATTTAGGCTATAGTCGAGCGTTTACCTTAATGTTAAAGGAGGGCGTGCGAGAAATGCCAAGCGCATGGG ACATTAAATAGAAATGCACCTTTTGCCTGATGTGTAGTCAATCGATAGCTGTAAAGGGCTAAATACAAACCCC AACTTTAGAAATCAAGGTGAAGGCAATCCATTGCCGATGTGTTGAACATGAGCGTGAAGAGGCTTATGAATTTT TTGCTAAATCCCTAAATCGCGTGAAGTTAAACGCTTATGGATGGCTTAGGCTATATCATTAGGCAAA ACGCTACGACTTTAAGTGGGGGAGGCTCAAGGATCAAAATAGCTAAAGAAATGAGTAAAGAACACAGCAAA ACCTTTATATTTAGATGAGCCTACTACCGTTTGCATTTGAAGACGTGAATCATCTTTACAAGTCTTGCAATCTT TAGTGGCGTTAGGCAATCTATGCTAGTGAAGCATAATTTAGACATTATCAAAACGCTGACTACATTATAGACAT GGGCGCTGATGGGGGATAAGGGCGGAAAGTCATTGCGAGCGGCACGCTTTAGAGGTGGCGCAAAATTTGCG AAAAACCCAAAGCTACACGGGAAATTTTAGCTTTGGAATTGAATAGCT	2414	NGVEIVGLEHLDKVIYLDQAPIGKTPRS NPATYTGVMDEIRILFAEQKEAKILGYS ASRFSFNKGGRCCEKCCQDGDKIEM HFLPDVLVQCDSCCKGAKYNPQTLEIKV KGKSIADVLNMSVEEAYEFFAKFPKIAV KLKTLMDVGLGYTLGQNAATLSSGGEA QRIKLAKELSKKDTGK'LYLDEPTTGL HFEDVNHLLQVLHSLVALGNSMLVIEH NLDIKNADYIIDMGPDGCGDKGKVIAS GTPLEVAQNCEKTSYTGKFLALELK
HP1489	2415	AGCCGGGTTGTCAAGGTTACCATCTAGAGCCTATGAGTGGGGAATCTTTGGATTCTTTACGATGGATTGAGCG AGTTGGACATTCAAGAAATCTTAAACACCCATTCAAGCCATAGCGGGGTTAGTTAGCACTATGTTAAG GGAACGGATAATCTAATGACCGGATCAAGAGCGCTTTGAATAAGATTTTGCAATATCATGCAAGAAATAGACAAA AACTCACTCAAAAGAAATTTAGAAATCTTATCAAAAGACGCCCAAGGAATTAAGGCAAAAGAACCGGATAAAGACAA ATAACGCATAAAAGAAAGAAC	2416	AGFVKVITILEPMSGESLDSFTMDLSEL DIQEKFLKTTTHSSHSGGLVSTMWKGTD NSNDAIKSALNKIFANINQIEIDKLTQK NLESYQKDAKELKGKRN
HP1489	2417	AAGCGGATGGGGGATGGCTGAGCCTTTAGAAATCCTTTTAAAGCCGCTCAACGCTCTCTAAAGACGCTTATTT GAAACAGAGAAAGTATAGTCATGGCGGCGGAGTATAGAAAGATTGACAGCGTTGCAACGATTAGCAATCTTTC TAGCGGATTCAAGCGAGCGCTTAGCTTGGCGTTATTTAAGGAGCCAAAGTTACTTTGATCGCATCAAACTT CCCCACCCCTTGCCCTAAAGAAATCAAGCGTTTATGAGCAGACCGCTTCTTATGAAACCGCCCTGAATAGTG CGCTAACAACTTGCAAAACATGCTTAAACCCCTGCTCTCAATTTAGCCGCCATTAGCGATTATGTGCTTAA CTTCTTTAATTAAGCTTAAAGAAAGCGAGATAGCGGAAACCTTAAACATTAAGTGCCTCAAAATAAGGATTACT GGTTCTATCAATCCTAATCAATCGTTAAATCGGTTTAAAGCCGAGATAATCAACAAACGCTATCAAAACGCT CAAAATCTTTTAAACCTTTTAAAGATAACGGGAGGATTGCTCTGTTGCTGCTTGAATCTCATTAAAGATTACGCC CTTTTGGCTCATTAGAGAAATGATTGCGCTCTTAGCCATCATAAACCCAAATCCCTTCTATGAACAAATTAGA AGCGAGCTTTAAATCCTTGATTTTATCAAGAGAACGCGCTTAAATGCTAGAGCCCTAAACGCCCTAAACCAAGCTT AACGCTCTTCAATCCAAACCGCTACGCACTTTTAAAGCGCTGCTTACCTTCTTAAAGGTTTAAAGAAACAA	2418	GDGAMAEPLLEILFKAAQTLLKDAYFEN REVVMGGASIEKIDSVRTISNLSSGQIA SALALALYFKGAKVTLIA/SNFTPLPKEI TSVLVSDTASYENALN:SAANNLQKHAL KPLLFLNLAASDYVPKT:SFNYKLKKEI GETLNIECVQNKDLLV:INPNQFVKIGF KAEDNQQNAIKNAQNLLKPFKDNGKD CSVVALNLKDSRPF:LENELWLFH HKTQKIPSMNKLEASFKILDFIKDNAL
HP1489	2419	GGGTTGGGTTTCAAGGAAATTTTACATTAGCGTGAATGAAGAAATGAAAGCCCTTTTGAATGTTACCCCT AACGCTAAATAATTCAGGGTTTTCATTAGAAACCGACTATGTAGGCTTGGGATAGACCGGCAATGGCGTG TCTGGCGGTAATAATGGCGTGGTGGATGCGGGAGTGGATTACGATAGATTATCAAGAGGCGCAAGCAT TTAGGAGGGTGATTTTACCGGTTTAGCCCAATATATTATGCTATGCTATGCTATGCTATGCTATGCTATGCT TTCAAGGCGCTTAGATTCTTTAGAGTTTACCTAAAGCACTAGAGACGCTGTGAATACGGCATGTTTGAAGCGTC ATTGCTTGATCCAGCATTTAGCCAAATCAAAATCTATCTTTGTGGGCGATGCGAAGTATTGAGCGCGTTT TTACCCCATCTGTTTGAAGGAGCGTTGGTTTGAAGGATGGAATCGCTCTTAAAGCAAGGATAGTAGA ATGCAATGATGCACAAATTTAGTTTGGGCGATTTTGGCGCTTTAGCGATGCTTTAGGCGATTGTGTGGGC ATGTGTGGGGGATTGTAGCGGCTTCAAGCAATAAGATTCTAAAGTTACAAAGTTTCTTACAGCTCACTTGC CATGCCCTTATATGATGAGGAGGATCAGCACTACATGCTTTAGGGCTATAGCGGCAAGTTTGGGCGATAGTCT TAGCGTGAGCATGGGTTTGGGGTGTATTATTATTAGCATGGGATTATTTGATCTGTTAGCGTTGCTAGGGGC AAGAAATGGAATAATTAAGCTTTCAATCCCTTTTATTCTTTTATGATGAAATAACCTTGCAATCTCAAAACATTCTAG GGCTGATTCTTAGCGGTGTTGAACGGGTTTACCTTGCAATGATGGTATTCTGTTTAGCGGCGTATTCTCA GTCATAGCGCGT	2420	RLGIQKEIFYISVNEENE:KALLNCPNA KNIAGFFHLETDYVGLGIDRQMACLAV NNGVVDAGSAITDIIKEGKHLGGCIL PGLAQYIHAYKSAKILEQPFKALDSLE VLPKSTRDAVNYGMVLSVACIQHLAK NQKIYLCGGDAKYL:SAFLPHSVCKERL VFDGMEIALKKAGILECK
HP1489	2421	TAGCGAACAATCCAGGCTAAATAAACAATGGAATTTATTAGTGAATAAGACTTATAAGAGACGCTTCTTATTGAAA GAATACAAAAGCTTGTCTAGCGTGGAAATAGCAAGGAAACCTTAAACTCCAGAGCAGGCTTTTACAAAGGC TTAAGCACGAACGCTCAAGTCATTGATGCGAGGAACACGCTTCTCTATCGTGTGGAGCAAAAGCGTGGCTTA TAAATACATCGTTTCAATTAGCGGAATTTAATGGCGTTAAGCGGATCATATTGATTATTTATGAATTTGTTTAAAGGGA	2422	SEIQAKKNMELLVNTYKETLSYLKE YKSLSSVELAKENLKLQEQAFQLGSL TNAQVIDARNLTSSIW/EQKSVAYKYIV SLANLMALSDHIDLFEYFVY

HP0391	2423	AAAAATCATGTCA	TGTAGAAATCATTAGAGATATTGCTGATCAAAACCAATCTTTAGCCCTAAAGCCGCTATTGAAGCCGCAAGGGCCGCGAGCATGGCAGAGGCTTTGCGGTGGTGGCTGATGAGTAAGAAAGCTCGCTGAAGGACGCAAAATCGCTCAAGAGATTGAAGCCCAATATCAATATTTAGTGCAAGCATTTAGACACGAGCGAAAGCATTAAGAAACCGAGGTTAAAGAGTGGAAAGAAATCAACGCTTCTATTGAAGCCTTAAGATCGGTTACTGAGGCAATCTAAATC	2424	VEIRDIADQTNLLALNAAIEAARAGEHG RGFAVWADEVKRLAERTQKSLSEIANI NILVQSISDTSSEIKNQVKEVEEINASIE ALRSVTEGNLKI
HP0391	2425		ATTCAAGCTTTACTCGTGGGGTTCAAGAAGAAATATTACGCTATCCGCTTTCTCAGTGTAGAAACCGTGGCGCATCAGCCAGGATGAAATTTACACCGTTGATGGCAAGAGCGTGTGCGTTGAGAGATGAGGTGCTTTCTTTGGTGGCGCTTTCTGATATTTTAAAGTAGATGCTATTTTGGAAATCCAACTCAGATGTGTATGTTGCTTGGCTGGCTGATCAA AAAATTGGCGTGTGCTGATTTTAAATCGGTCAAGAAGAGTGTGCTTAAATCTTAACTATCTTAAAAACA CTAGAGGCATTGCTGGTGTCTACGGTGAGAGGCGATGGGAAATCACCCCTTATTGTAGATGTGGGGCGGATGATGGA TATGGCAAAAGCATCAAGGTCAATATCACTACCTTAA	2426	IQALLVGQEEYAIPLSSVLETVRISQ DEITYVDGKSVLRDLRDEVLSVRLSDIF KVDAILESNSDVYWIIGLADQKIGVVD YLIGQEEWIKSLGYLLKNTGRGIAGATV RGDGKITLIVDVGAMMDMAKSIKVNITT
HP1000	2427		AGGTGTTCAAGACAGCAAAAGAGCGTTGCGGGTTCTATGAGATCAGCGAGTTCATGAAAGCCTATACCGCA TTGCTAAAAAACAAGACCGATACGCTCTATTATTGAGGTATCTCCCTCTAGGTATGGCCAGCATTTTAAACGACT GCCCTTTATGTCAAATACCCGTGATTTGACGCTTTGAAAGAGCTTTGGTGTCTTATTATACCAACTTGGATTGCAG GAGGCAGATCAGCGCATCAAGCAACCAAGTATCAACATTATCAAAAGCTTAAAGCAATAGAGCGTTGAAACCC ATCAAGAGCTTATATTGAATAGCATCGACTCTTATAACACCTTGTATCACTATACCTTATGGGATAGCTCTT CTGTTTATCATAGCAATGGGTGGTGGTCTGCTTGTAGCCCTAGCTAATTTTTCATGCGAGATGAAGAGAAACCCCAT TTATCGCTATGATGCCGAAACCCCAAGTGGAGCATATTTGCCACAAACGCCCAAGAGGCGAGTCAATGGAACGC GGATTTTGACAAAGAAAGAGAGAGAAATGGTAAATATATCGCGAATTTAACCCCTTTTAAAGCGTAAAGAAACGC GCATGCTTTAAACGGGGATTT	2428	VFKSKKDACGFIYEISEFMKAYTALLK KQDRYVYLLRPLPSRYWASILTTALYV KYPDFDALKLLVSYYYQTWIAAGTTIR IKQTSINIKNVSKNSKSVETIKELILNSIDS YNTFDQYLYNLWDSSSVYHSHKVVWV LALANYFMADEEKPHFIAMDAETQVEH ILPQTPKRGSQWNADFKEKREEWVN NIANLTLKRKKNAHALNGDF
HP0031	2429		CCATGCGTAAAGGCGATTTGATGGGTGTTGATCGTGTGTTAAATGTTTCACTTTGTTAATCCCACTAGAGCGT ATTTTGGCAAAAGGACGCCCAACAGCTTTTAAATCATTGAGCATTTAGTCAAGATTTGCTTTTAGACATTTGAAATAGC GCCATGCGAGATCGTGGCGATGACGATAATTTGGCTTTAAGCTCTAGGAATGTGTTTGAATGCCACACAAAGAA AACAAAGCCCTAGCCATTCCAAAGCTTTAGAAAAATCCAGCAGGCCATAGATAAGGGCGAAAGCGTGGCAAAA CTGAAAAAATAGGCTTGAAATTT	2430	MRKGHFDGVQVILKMFHLVNPTRAY FGKDAQQLLIEHLVKDLLDIEIAPCEI VRDDNLALSSRNVLNATQKQALAI PKALEKIQQAIDKGEKACEKLLKLEI
HP0031	2431		CCCTACTTAAAGGCGGTAGCTATGGGTGCTTAAATTTTGGCCACTCAAAACCATGCGGCGACTGACATCAAT AGAAAGCATTTAGGCTCAATCGCAACCGCATCGCTTTGTCTATGGCAGACAGACAGCAATAGTATTTGGGTGA CGATGCGGCTTGTAGCTTGTGAGGCGGAGAGGCTTTTCAACAACCAATGGGGGCGATCAAAAGACACCAACG ATGAGTATCCCTAAAGCCCTGATGATTTCAAAACCTTTTATCAAAAAATCCATAGAGATTTAACCAGAAATCTCG TGCCCGTAGAGCATAAATCTATAATGGCGAGAGCGCTTAGAAATGCCCTAACACCTTAAAGCCCAATGAAATGCGT TTGCATCTGGCAAGAGCGGATTTAGCAAAAGGACTTGTGTTGGTTGAAATAGCGGAATCGCATTTGTT GGTGGTGAATCAAGATTAAAGCGCTCGCATCGCCCTGATGAAGCTTTTGGCTCAAAATTTCAAGA	2432	LLKGRSYGVHLILATQTMRTDINRSI MAQIANRIALSMDAEDSNSILGDDAAC ELVRPEGIFNINNGGHQKHHTKMSIPKA PDDFKPFKKIHRDFNQRLNLPVEHKY NGEKPLEMPNTLKANEMRLHLGKEAD YEQKDLVGVFENSESHLLVWSQDLA RIALMKLFAQNFK
HP0031	2433		CAAAATTTCTATCAAAACGCGGCTTAAATTTGATAATACCCCTATTGAAGAAATTTGCGCATGTTATGCTTGCAAA CGCTATTCTAAAGCCTATTGACCATTTATTAGGGCTAAAGAACTCACTACGCTCGTTTGGCCAGCTTGCACAAAT TTGCAATTTTATTAGAGCTGGTGAAGACGCGCAAGACGCTTTTAGAAAGCGGTTTTAGAGTTTTAAAGAAAT TTTTGGAGAAATACAACTCCGCTCTATTGAATGATGGAATGCAAAATCTAAAGCGTTTTTACCATCAATAA AGTTTTCTTAAATAAGGCTTAGTTTTTAAATTTGATTAAACAAACCCCTATCTTTGATAAATCTCAGGGTGGTG CTTTTAAAGCGCTATGGAACCAAAATACTTTCCGGGTGTTCTAATCACCTCTTCGACAACTCGCTTGGCT TGCGTGCATTTCTAAATATCGTTTGGCGTTATCGGTGATTGAGAGCGGATCTCGGATAATAGGTCGCT	2434	KISIKNAPYKLDNTPIEENCACYACKRY SKAYLHHLFRAKELTYARLASLHNLHF YLELVKNARNAILEKRFLSFKKEFLEKY NSRSH

HP0031	2435	TTTAGAACTGGCTTAGGCTATCAACTCATCAGTCTTGGGACATGAACAAGGGGGGATTTGTAGAAAGGATTAGGAGTATTAGAAAGATAGCGAGCGATTATGGTTTTTATGATGCTCAAAATCCGATCAGGATTAATTTGCAGCTCCGCCAACGCAATTATGAATCAAACTTAAGGCAATTGAATGGTGGGATGATGATGCCAGCAAGTTTTATGCATGAATACCGGTTTTGTGAATAAGAAATTGAAGGCAATTCCTACTAAAGAGCGGGCTTTTGGAAATGGACGCTTTATGATTGAACACTAAATAAAGAAAGCAATTAATCAAGGCTATACCAT	2436	LEALGYQLISLADMKQGGDLERIRGIRKKIASDYGFLEMPQIRIRCNLQPPHYEIKLKGIVIGEGMVMPPDKFLAMNTGFVNKEIEGIPTEKPAFGMDALWIETKNKEEAIQGYTI
HP0031	2437	TGGGGGGGATTTAACCTTAAAGATATTTTAAATAGTGGGCTAGGCTGCATTTAGTGGGAATATTAATCGCGCTTATTTAAGGGATTACCGCTTAGCCTTGAATGAACACAGCAAAATACTCTTTAAACCCCAACCCCATTTTAAAAAGACAGCCCTTTTAAAGATTTACAACTCTTGTAAAGAGCATGATCTCATTGATTATTAATTTAGGGGATGTGGAATTTGTCAACACAGAGTGGCTTTGGAAATTTTAGCCCTAAACCATCGCTTTAAGCTTTAGCGGGGATAAATCTTTAACAGTCCGAAGGGCAATTTATATGGGCAAAAGAACGGTTGAAGCGTTAAACCAACCATCATCAAGAGACATTACTTTAAAGGTGGTAAATCACGCTCACCTTGCCTTTTGCAGCTTAAAGCAAGCCCTCAACTACGCTCTTTTAAAGCCTTTAATCCATGCTTATGAACCAACTAGCCTTAGCTTTCTAAATAGGGAATTTGTTGGTAGGGAATTAGAATCCTTTTAAAGCCTTAAATCCATGCTAGCTTAGCTTTTCTAAATAGGGAATTTGTTGGTAGGGAATTTGAAAGATCGCTCTGTTTTAGAGATTTCATGCGAATTCGTGCTTTGAAGTCTTTAGCTTGAATGAAGAAAGATTTGAAAGATCGCTCTGTTTTAGAAATTCCTAATAAGCTTAAATTCGCTATAATAAATTCCTTTAAAGCGCCATATCCCCACAAACGCTAGAGAAATGATAGAAACGACAGAACATCAATTTAAGGAACCTTAAGAAATGGAAGAAATCAGCGATCTTATAGAAATGCATT	2438	GGDFNLKDLNLSGARLHLVGNINRAYLRDYRLALNENSKILFKTHINPHFKDTPFKDLQTLAKEHDLIDYNNLGDVDLSNRVALEELALKPSLLSFSADKFFNSAQAGIIMGQKERVEALKNHPLYRVLRVGKITLTLLFCSLKAWINHQEDITHALLNQTKDALLQKALKLYALLKPLELNVSIASSFSKIGNLFGRELESFCVKIQPKNTRALNSEKLYLKLQKQGVARISSCEFCFEVFSLNEKDFEKIALVLEELNKA
HP0031	2439	CCATTGGATTAGAAATGATAAAACGCTAAAGAAACATTAAGCCCTTTAAGCCCGATCAAGCCTACCTTTCCTTTTACGAATTTGACAAATGAATAAAACGAGCAACACCGCTTTTAAACGCTCCTAAACCTTTTAAATCAATACCGCCATTTAACGCTCTTCTCAAAATACCAACCTTGAAATCGTGCCCAACCCCTTTGAACACACTTGCACTAACCCATTATAAGCCGCAAAACCATGCTCTCTTTTAAACAAAGATTCTTTTCTTATGTTAGGAATCCTGGGTTTTATTTATAGCCTTTTGAAGGATTAATGCTTTTACCCCAATGATTGGTTTTTATCTTGTTTTATGCGAAAAATACGATCAATTTTACCAGTTTGAGCGTGTGTTGGTTGAGAGCATGCAATTAAGACGCTTTAGCGTTTTAGCTTTATGTTTTTAAATCTACCATCAATCGCCTATAAAACCTTTTAAAGCTTTTAAATGACGGCTTTTATCAAAACCTTTGCTATGTTTTTGGTTTATACCGCTTTTTCGATGCTTTG	2440	HLDLEIDKNAKENIQALLFPDQAYLSLFTKFDKLNKNEQHRLFLNAPKPFINTAHFNALSSKYPTLEIVRQTLIKHLLTNPL
HP0705	2441	TGGCGTGAAATCCCGCTATCAATCAAGGATTTGAGGGCCAAATGGGCTGATGGATTACAGCGCTTGTATGCGTTCTATATCAATTACAGATAGTTTTTAAAGCTCTTTTAAAGCTTAAAGAGGCTTTTACCTTTTGTGTTCTAACAAAGCTTTTAAATAATCAATCTACTTTGTTTAAAGGATAATATTTATGCGAGATGCTGTTGTGGGATCCAGTGGGAGATGAGGGAAGGGAATAATGTTGATAGGATCGCTAAAGATTAGCTTTG	2442	GVKIPAINQRYLRANGAIVDYRRLYAFYINYTIGF
HP0705	2443	CAATGTGCGCAGTGGGATTGCAAGGAAGATTGCGCTATTGCAGCAAGCTCACACCATCAAGGAGCGATCAAGCGCTATAATTTAAGATGAAAGAGTGTTTACAAGAGGCTAGAGCGTTAAGACAAATTAGGGCTTTAGGGTTTTGTCTGGTTACTTCAGGGCGGAATTAGACGATGAAATAATGCGAATACATCGCTAAATAGCTAAAGCCCATCAATCAAGAAGAAATGGCTTGCATCTAATCGCATGCTGCGGGCGCGGATTGGAGCAATTAGAAATTTAAGAGATGCGGGCATCCATAGCTATAACCAAAATTTAGAGACTTCGCAAAATTTCTCCCTAAGATTGTTCCACGCAACATGGGAAGAAAGGTTATCACATGCGAAACGCTTAAAGGCGGGTTAGGCTTGTGCAAGTGGGGATTTTGGGCTTAATGAGAAGCTTATCACATGCGAAACGCTTAAAGGCGGCTAGCTCTCTCCGCAACCCACGCGGATTAATTTTTTCATTGCTGGGAAGATCGGATTGAAATGCTTAGAGCGCTAGCTTGCCTCTCTCCGCAACCCAGCTTAAATTTTTTCATAAAAACCCGATTGCCATTGATGCAGAGACTTAAAGTGCAGATGAAGCTGCTTAAAGATAATGACAAAAAGGAGCAATTTTGCCTAACGCTAGCTTATGGTGGCTGGGGCGGTGAAGTGGTGAAGATAATGACAAAAAGGAGCAAGCTTTTGAATACGGCATCAATCGGTGGTGTAGGGGACTATTTGACCAACCAAGGCAAGCCCTAAAAAGATATAGAAAAACTGCTCTCTTATGGCTTGACAAATGCCGACAAAGCTTTTGGGCTTGAGCGAATGTTTTACTAGTTTTTCCGCTTCTTAGAATGATTTTCCCAAGCGTCTGAAAAACGCTTTTGGGCTTGAGCGAATGTTTTACTACCTTCTAGCTTGTAGTTTTTATACGATTTTGTCTTTATCGCCTATTTGTGTTGTGTTAGTCTTTTGTGCTCATACCTGCAAGCGCACAGCG	2444	NVRSGDCKEDCAYCTQSSHQGAIKRYKFKDEKVLQEARALRQLGALGFCLVTSGRELDDEKCEYIAKL/KAINQEELGLHLIACCGRADLEQLFLFDAGIHSYNHNLETSONFFPKICSTHTWEERFITCENALRAGLCSGGIFGLN'ESWEDRIEMLRALASLPHTTTPINFFIKNPVLPIDAEFLSADEALECVLLAKEFLPNARLMVAGGREVFKDNDKKEAKLFEYGINAVVLGDYLTTKGKAPKKDIEKLKLSYGLTMTATSCH

HP0705	2445	GGCTTTGATTACCAATACTCGCTTGTAAAGGATTTTAAAGAAATCCGAGCTCGCTAAAGAGTCATAAGCTATTTTAAAG CCAAATACCAAGCCATCTTTCCCGGAGTTTAGGGCTAAAAAAGCAGCATTTGCGTTCTGTTTTTGAAGAATTTT TACAGCTTTTAGGGGTTTAAAGGAGTTTATCAAGCCTTAGAAACAAGCAAGAACTATCATCATGCCCCGATTAA GGCGTTATTGCACCCCTTACCTAAAAAGAACCTTTAGAAAGCTTTAAATCACTCTTTTAGAAAAATATAACCTTAA GGATTTGAAGACAAAGCTCTTTTATTATGGCTATGAATTTTAGACTTAGTGAAGTGAAGGCGGAAGCGAGCTTTAG GGGGATATTGTGATATTATCGGCCAAATCTAAAGCGTATCGCTTGAATTTTGAACCCGAGTGTGAGAGCAT TAAGGAATTTGATCCCATTAAGGATCAATGAGCCTTAAAGAAATTTGTTAGAAATGAATCCGCCACGCTTTTAGT TTGGACGAATCATCTTATAAGGATCTAAAAACAAAGTGAACAAAGCCCTTAAATAGCTTTTCTAAAGATTTAAACCA GTTTGGTTTGTGTTTATAGGAGAAAAAGCACAAGACTTACTAATCGTTTATAAAGCATTATAAGTCTAGAGCTTT AGAAAGAAATCAAGAAATTAGCGAGCTTAAACGAATTGGATTGTGAGCGTTTCAAAATTTTAAAGGTTTAAAGAAACGC GCAAGGCTATGAAGATTTAGAAATCCATGCGCATGCCCTAGAGGCTTTATCGCTTTGCAATTCAAATCATATAAATCAC GCTCCTAGCCCCCAATAAAACGATTTTAGACAAACGGGATAA	2446	GFDYQILACKDFKESELAKEVISYFKPN TKAILPEFRRAKNDLRSFFEEFLQLL GGLREFYQALENKQETIIIIAPISALLHPL PKKELLESFKITLLEKYNLKDLDKLFY YGYEILDVEVEGEASFRGDIVDIYAPN SKAYRLSFFDTECESIKEFDPITQMSLK EDLLEIPPTLFSLDESSYKDLTKVEQ SPLNSFSKDLTSFGLWFLGEKAQDILLI VYKSIISPRALEEIIQELASLNELDCERFK FLKVLNAQGYEDLEIHAHALEGFIALH SNHKITLLAPNKTILDNAI
HP0032	2447	CGCTATCTTATGATATTGCCAGGCTAGGGCGCATGGGTAGGGACAAAGCCAAAGCGTTAGAAATTCCTTTTA AAATTATTGGTAGAGAGATAAAATATGGCTAAATCAATCAAGATCTCAATGAAGTTCTAAACCAAGCTTTAAATTT AGCCCTGGATCTTAACCCAGCCCTTTGCACCACAGAGCATGTGCTACTAGTCAATTTTGAACATGAGAGCGGGAAA AGATTATTGGCCTTTAGAAAGAGATGACTATGATAAATTAACAAATCCTTAAAGACTATTGTTGCAATATGTGCC TTTAAAGAGCGATCCAGCCAAATGCTGCTAGGAGTTTGTCTATTAAAGATGCTTAAAGAAATGTATGCGAGTTG TTTTGAGAGCGTGGCGTGGAAAGATTGCTTATTTAATGCTAGATCACCCGATGTTACGCTTCAAAACTCATGGA TAGTTT	2448	VYPYDIARHRAAWVRDKAKALEFPLKL LVEEIK
HP0274	2449	AGTATTGCATCATCTTTGGCAGCAGCTCAACACAGATTCAAGCTAATACGATCTTAGCAAGTTAAAGAAATGTTAA CAACCACTCAACAAACGCTGGCTTTAGGTGTAATGGTGAGAACTTAGCGCTATCAAAAAAGATTACCTCTATT AACAAACGAACCTCAACGCGCTATTGTAGAGCTTTCTAAAGACAGCCATCTGAATCAGGCCCTTCAGCTTATAGGG TCAAAAAAGGGGAGTAAAGACTAAAGGACTTAACTTTTGAAGTGTCTTCAACCTTTTGGTGGTGGTT GCGTAACCAAGCGAGCGATTCTTCTTAAATGCAATAAGGTTCTGAGCCTTTGCTAAAGCTTTTACGCATAAAT GAGAACTAGCGGTTTCACTCAGTCCCTCCATCCACCTTCTCTCAATGCAATCTCGCACACACGAGAGCTC ATGACAAAGTGTAAAGGGCAAAAGCGTTCTCATACCTATGAAGACAAAGTTTTCCTCAAGCACCAAGAAAGAAAT TGAGCATGATTTAAGCTCCCTTTTCAATGGAAAGAGCCTGGCTAGGGCGATTGTAACGCTACATGCGTTTTT ATAACCCCAATTTCACTCGCTATGACGGCATGAATTTAACGCTTTTAAAGAGTATAAAAAAGGGTGTGCAAAAA ACGAAAAAAGAAATATCGCTTTTCTCTATCAATGTATCCCTTACCCCACTCTCAGAACAAACGCTTGTATTATGT GGTGTGACCAAGATTATAAGCCTACAGCATACAAAGCTCTTATAGCTCCAATCTCAAAAGAACTGTATATA GAGATTGAAACAAATCAAGTGTCTATTATAATGGAATAAGAAATAGGGCTTTGTTTAAATAGGATAATCTAAG CGGATTTTCTAAACCCATTCACTCAAGCTTGATACAAAGTTTGAATTAATAAAGTACAGAGCTTCCATGGCTTTT CTTGTTTTTATGCGATGCAAAATTAGAGCGTTCTGTGCTTAGCGCAAGGTTTATTCTAGCGCACCCCTCTTGT TGAAAGCTAAAGCCTAAATTAGAAAAATCCAGCTTTTTCGCACTCAAGCAGCATGATTAGAAACAGAAAGA AGTAGAAGAAATTATGGCGCAGCTGAATTTAGGTTTGAAGGTTTAAATGAATTTAAATTTTGAATATGGATAA TGAAAGCGGTTTTTATTGATTGAAAGAAATGAACGATTAAACATCTCGCTCAAGTCAAGAAAGATTGCAATTGAA TTAAAGGGGAAACACAGAAACAGCGAGAAATTTATCTTAAACGCTTTTAACTGCAATATTGTAGAAATTAGAGC TTTAGCCTTAAAGGTGAAGGCGATTGAGCGGGAAGCGGCTAGATAAAGGCTTATGGCCAGGCCAGCAT GGGCAAGACGCGCTAAGACTTCTGATTACGGTTGCAATTGAAAGAAAGCAAAAGCTAAATGATGTATGCGCAT TTCTGAAAGCAATTGAGGAGTATTCTGTTGGAAGCCAATCGCTTGACG	2450	YCIIFAHDLKQIQANYDLSKLKELNNH FKQRLAFRCNGENLSAIIKKDPLLTNEL NALFVELSKDSHTEFRPFSL
HP0274	2451	ATGACAAAGTGTAAAGGGCAAAAGCGTTCTCATACCTATGAAGACAAAGTTTTCCTCAAGCACCAAGAAAGAAAT TGAGCATGATTTAAGCTCCCTTTTCAATGGAAAGAGCCTGGCTAGGGCGATTGTAACGCTACATGCGTTTTT ATAACCCCAATTTCACTCGCTATGACGGCATGAATTTAACGCTTTTAAAGAGTATAAAAAAGGGTGTGCAAAAA ACGAAAAAAGAAATATCGCTTTTCTCTATCAATGTATCCCTTACCCCACTCTCAGAACAAACGCTTGTATTATGT GGTGTGACCAAGATTATAAGCCTACAGCATACAAAGCTCTTATAGCTCCAATCTCAAAAGAACTGTATATA GAGATTGAAACAAATCAAGTGTCTATTATAATGGAATAAGAAATAGGGCTTTGTTTAAATAGGATAATCTAAG CGGATTTTCTAAACCCATTCACTCAAGCTTGATACAAAGTTTGAATTAATAAAGTACAGAGCTTCCATGGCTTTT CTTGTTTTTATGCGATGCAAAATTAGAGCGTTCTGTGCTTAGCGCAAGGTTTATTCTAGCGCACCCCTCTTGT TGAAAGCTAAAGCCTAAATTAGAAAAATCCAGCTTTTTCGCACTCAAGCAGCATGATTAGAAACAGAAAGA AGTAGAAGAAATTATGGCGCAGCTGAATTTAGGTTTGAAGGTTTAAATGAATTTAAATTTTGAATATGGATAA TGAAAGCGGTTTTTATTGATTGAAAGAAATGAACGATTAAACATCTCGCTCAAGTCAAGAAAGATTGCAATTGAA TTAAAGGGGAAACACAGAAACAGCGAGAAATTTATCTTAAACGCTTTTAACTGCAATATTGTAGAAATTAGAGC TTTAGCCTTAAAGGTGAAGGCGATTGAGCGGGAAGCGGCTAGATAAAGGCTTATGGCCAGGCCAGCAT GGGCAAGACGCGCTAAGACTTCTGATTACGGTTGCAATTGAAAGAAAGCAAAAGCTAAATGATGTATGCGCAT TTCTGAAAGCAATTGAGGAGTATTCTGTTGGAAGCCAATCGCTTGACG	2452	DKVLKGEKAFITYEDKFFPSTKEELSM ILSSLFQWKEAWARGDFERYMRFYNP NFTRYDGMKFNFAKEYKKRVFAKNEK KNIAFSSINVIPYNSQNKRLFYVVDQ DYKAYQHKNKLSYSSNSQKELYEINN QVSIIMEK
HP0274	2453	CTTGTTTTTATGCGATGCAAAATTAGAGCGTTCTGTGCTTAGCGCAAGGTTTATTCTAGCGCACCCCTCTTGT TGAAAGCTAAAGCCTAAATTAGAAAAATCCAGCTTTTTCGCACTCAAGCAGCATGATTAGAAACAGAAAGA AGTAGAAGAAATTATGGCGCAGCTGAATTTAGGTTTGAAGGTTTAAATGAATTTAAATTTTGAATATGGATAA TGAAAGCGGTTTTTATTGATTGAAAGAAATGAACGATTAAACATCTCGCTCAAGTCAAGAAAGATTGCAATTGAA TTAAAGGGGAAACACAGAAACAGCGAGAAATTTATCTTAAACGCTTTTAACTGCAATATTGTAGAAATTAGAGC TTTAGCCTTAAAGGTGAAGGCGATTGAGCGGGAAGCGGCTAGATAAAGGCTTATGGCCAGGCCAGCAT GGGCAAGACGCGCTAAGACTTCTGATTACGGTTGCAATTGAAAGAAAGCAAAAGCTAAATGATGTATGCGCAT TTCTGAAAGCAATTGAGGAGTATTCTGTTGGAAGCCAATCGCTTGACG	2454	CFLCDAKLERSVALAQGFILAHPSCLK AKSLNLEKIQAFFRTQSTIDLETEEVEE LWRTLNLGF
HP0274	2455	CTTGTTTTTATGCGATGCAAAATTAGAGCGTTCTGTGCTTAGCGCAAGGTTTATTCTAGCGCACCCCTCTTGT TGAAAGCTAAAGCCTAAATTAGAAAAATCCAGCTTTTTCGCACTCAAGCAGCATGATTAGAAACAGAAAGA AGTAGAAGAAATTATGGCGCAGCTGAATTTAGGTTTGAAGGTTTAAATGAATTTAAATTTTGAATATGGATAA TGAAAGCGGTTTTTATTGATTGAAAGAAATGAACGATTAAACATCTCGCTCAAGTCAAGAAAGATTGCAATTGAA TTAAAGGGGAAACACAGAAACAGCGAGAAATTTATCTTAAACGCTTTTAACTGCAATATTGTAGAAATTAGAGC TTTAGCCTTAAAGGTGAAGGCGATTGAGCGGGAAGCGGCTAGATAAAGGCTTATGGCCAGGCCAGCAT GGGCAAGACGCGCTAAGACTTCTGATTACGGTTGCAATTGAAAGAAAGCAAAAGCTAAATGATGTATGCGCAT TTCTGAAAGCAATTGAGGAGTATTCTGTTGGAAGCCAATCGCTTGACG	2456	LALKGERRLSGKSALDKRAYGPGQHG QRRAKTSDYGLQLKEKQKAKMMYGIS EKQFRSIFVEANRLD

HP1482	2457	AGTGGGGATATTATCGCTTTATTGAATAGCGATGATTTTACAAAGATGAGTTGTGGTAGAAAAAGTGGTCATGAG TTTGAAAGGAAAAAATTCGATAGCGTGATCGGATCTGGTGTGTCAACCTGATGTTTAGAAAAAGTGGTGGC CTATTATGAGATCGGGAGTTTAAACCTAAACCTTGCTTTATGGCGTAGTCCAGCGCACCCACGCTTTTGTCA AAAAAGCCATTTATGAACGCTACGGCTTATACAAACCGATTATAAGATTTCAGCGGATTTGAGATGATCATCCGCT TGTTTGTGGTGCAAAAAATAAGCTTTCTTATTGAAAGAAGTGTAGTGTGATGCGCACCGTGGGTTAGCGCG AGCGGGTTTAAAGCCTTTTATTAGGAATAAAGAAAAACATAAGAGCATGTAAAGAAACGGCATTCAGGCGAATGTT TTTTCCATGCTTTTAAATACCTAGGAAATCATGGCTTATTAAAGGGGAAAGGGGGCTAAACGAAACGAT TAAAGAAAGATTAGCGTTAAATCGTGGTTTGAATCTTTCTTGATGTTGTAGGTGTAAGAAACATTCCTCACTAA GGCATTTCAATCCCTAATTGCAAGACAAATAGCCGATAAATCCAGATAAAACCAACCAAGGGGCTT CAATGATGAAAAAATCGCTGATGCTCTGTATTGGCCAAACCTTCAGCATGTGAGTATGGGCATGAGAGCGATTT TTTATTGAGCGATTAGTGGCGGATTAAAGGGCTTCTACGCTTCAACCGCATGGAATTTTACTCCCGACGCG ATGAATGGTTGCAAGACTTGATGGTTTAAATGTGAAATGACCGCTCGTTAAACCTTGTCTCCACCAAAAAAGG CGCATTTAGAGCATTTAGTGGCTTCTTTAAACGATTGAGTTTGAA	2458	SGDIIALLNSDDFYKDEFWVEKWHFEF RKNCDVYADLVFVKPDCLKVVRY EIGFNPKTLLYGW/PAHPTLFVKKAIY ERYGLYKTDYKISADFEMIIRLFVVKIS FSYLKEVLVWVRTGGVSASGFKSLLR NKENIRACKENGIANVFSMLLKYPRI MGLFKRGKGGKLRND
HP1482	2459	CAATGATGAAAAAATCGCTGATGCTCTGTATTGGCCAAACCTTCAGCATGTGAGTATGGGCATGAGAGCGATTT TTTATTGAGCGATTAGTGGCGGATTAAAGGGCTTCTACGCTTCAACCGCATGGAATTTTACTCCCGACGCG ATGAATGGTTGCAAGACTTGATGGTTTAAATGTGAAATGACCGCTCGTTAAACCTTGTCTCCACCAAAAAAGG CGCATTTAGAGCATTTAGTGGCTTCTTTAAACGATTGAGTTTGAA	2460	INDEKIADALYLAKTFMSAIGHESDFLL SDLVADLRASTPSNAMEILLPSDEWL QRLDGFNVKLHRSFKTLLHQKKAHLEH LVASLKRLSFE
HP1482	2461	CAAAACCCAAACGGCGGTATATGGCTTTTAAATTTTAGACATTCAAAAAAGCGCTTGGATAAGCGCTTAAGA ACGCTTTTATCCATGAATTAGAGCAGCCCTTAAACAGCGAAGCAAAATTTAGCCAAAGAGCTTCTCAATGAGCCT GTGGATAAAAGAAAAATTTTGAATCCCTATGTCAAGAAATCGCCGATCACACGCGATGGGAATACACCAAGCGCT GAAATTAGTGGAAATTTCTTATGTTATGCTATGCTGATGGGATTTGGATAGCAAGAAAGAAATTTTGTATGAT GTGGGGTGTGTTGTCAGATAGACATCAAGATTTAACGAGCTTTATGACAATTTTGAACGCTTCAATG	2462	QTQTGAYMRLKFLDIQKNALDINALRT LFIHELEQPLNSEQQNLAKELLNEPVD KKENFESLQCEIADHTHGEYTKRLKLV EFLMLLAYADGILDSKEKELFLDVGVFL QIDNQDFNELYDNFERFN
HP1482	2463	CGAAAAACATCAAAAGCGAGATTAAAGCTAGAAAATCAATTGATAGAAACCACTACAAGGCTTTTAAAGGCTATCA AATCTTTTAAACACGCTAGGGATAGCGCTAACAAATCAATCAGGCTAACAAACCGAAAGCCTTGAAGCGCTAAA CCAAGCGAAACAAAGTGCTAACACGAAATAACCGC	2464	ENIKSEIKKLENQIETTTTLLTSYQIFLN NARDSANNQITANKTESLEALNQAKTS ANNEIT
HP1482	2465	CGCCCTACAAAAGGCCATGCAAGAAAAAGGCTCAGACAATGCAGAAAAACCCCTGATGTTAAATTGCCCTGAAGATA TTTATTGCAAGCAACCGCTTTAGAAAGCATGCTAGAAACACAGACACTTTCCAAAGCAAGCTGCATCGCTATCGCTT TAAATCAAGATCAGAGATTTTGATAAATCCCTATTGAAACCTTAAAGCCCTTACAAATTAATCAAAAGAGGCTTA CCCCGTTCTTTATGAAGAATTAGAAATTTGCAAGTAAGCATGTGAGCGCTTCTTTGTTTAAAGGCTAACGCGCAAGT GTTTAGCGCGCTTTTCAATCATTTGAGTTATGAAAAAAGCTCCAAATTTTGAAGAGCATATCCCCATTAAAGAGTTA AACCGTCTTTTAGACGAAATTTATCCGGGTTTAAACCGCTTATCAGGTTATTTTAGATCCTAAATGGATCAT TTAAAGACGCTCTCACTAAAGTAACGCTACCCACAGCAACGCGCAACCTTTTATCTAGGATTAAATGAAATCT TGCGCAAAAACCCCTCTAAAGCGCTCAAGTATTTGAACGATCAGAAAGCGGTTGTCAAGACGATGATTTTCAAAAG ACAGAGCGATTTTTGGCAGTATTAGTTTCTAAAAAGAAAAACCTTAGAACGCTTTTCAAAAGCCAGCTTTAA TCTCTATAGTCTTTATGCGAGCGCAAACTCAAAACCGCCAGTTACCGCATCATTTACGCGATCCAGAAATTTAAG CCAAGAAAGATCCTCTTTTAAACACTTATGACCTTTTTCGTGGCAATTTTAAAGGAAAAACCTTGAGTTTGAAGAT GAGGCGCGTTTAAATGCGATGCTAAAAAGCCTGTATTATGAAAAAGCGCTCCTGAATTGACCTATCTTTTAAAGCCAA CGCAATAAAGA	2466	ALQKAMQEKGSDNAEKNPDVKLPEDI YCKQTALESMLTDTFQAASCIJALKS KIRDFDKPIETLKPLQIKIKEAYFVLYEE LEILQSKHVSASLKFANAQVFSALFNHL SYEKKLQIFEKHIPIKELNRLLDENYPAF NRLIYQVILDPKLDHFKDALTKSNATHS NAQTFFILGNEILRKPKSKALKYFERSE AVWKDDDFSKDRAIFWQYLVSKKKKTL ERLSQSPALNLYSLYASRKLKTPSYRI ISRQNLSDQEDPPFNTYDPFSWQJIFKEK TSLSKDEGAFNAMLKSLYYEKSAPELT YLLSQRNK
HP1482	2467	ATTAAAGCATGATTTTAGAGCAATTAGAAGAAGAAATAGAAGCCCAAAAGCGCTTAATCAGGCGTTATGAAAAA GAAGCCAAAGAGGGCAAGAAAAATCGTATGCCATTTTAGCGGAAGCGACAGCCCGTTTTCGGGGTAATTATG CGGCAGAGAAATTTAA	2468	IKSMILEQLEEELEAQKSALIRRYEKEA KEEGKKKSYAILAEATARFAGN'AAEN L

HP1482	2469	ACGAGCATGCGCACCAACGAGCAAGAGTAAGTGCTACTTTAAACGCTAACACCGGAAACATCAAAAGCGGAGATTAA AAAGCTAGAAATCAATTGATAGAACCACTACAAAGGCTTTAAACGAGCTATCAATCTTTTAAACAACGCTAGGGA TAGCGCTAACAAATCAATACGGCTAACAAACCGAAAGCCTTGAAGCGCTAACCAAGCAAGCAAGCAAGTCTAACA ACGAATAACCGCTAATCAACGCAAGCGCTAACCTAACGAGCAAGCAAGCAAGCAAGCAAGCAAGCAAGCAAGCAAG AAATAAACCGCAAGCGATAACCTAACGAGCAAGCAAGCAAGCAAGCAAGCAAGCAAGCAAGCAAGCAAGCAAGCAAG AATAAGCGGTGTTAAAAAACCACTATAATACCCCTAAAAATGGGAGTTTAAACATGCCCTTATTGATTAAAAAGC CCTTATCCACGAGCGGATCAGCCCAAGCCATAGAGCCTTACGCAATATCATCGCTCAACCAATCAACCAATATCA AACCTTAGTGGGTTACAGGAAGCGGTAAAGCTTATACGATGCGCAATATCATCGCTCAACCAATCAACCAATATCA TGATCATGAGCCATAATAAGACCTTATGCGCACAGCTTATAGCGGTTTAAAGCGCTTCCCGCATATAGGGTG GAGTATTTTATCTCCACCTTGATTACTACAGCCTGAAAGCTATATCCCTAGGAGGATTTATTCATTGAAAAAGACA GCTCTATTAATGATGATTAGAGCGTTTGAAGTTGAGCGGACCACTCACTTTAGGTTATGATGATGATCGTGGA TAGCGAGCGTTTCGGCTAATTATGTTGGTAAACCTGAAGATATTTAAAGTCATGGAAAAATCAAGTGGGC GAGAAAGCGGCTTACAAGAGTTTTTATTAAAGCTAGTGGAATGGCTATAGCCGTAATGAAGTGGTGTGATTAG GGGAGCTTTAGAG	2470	TSMRTNEQVSATLNANTENIKSEIKL ENQIETTRLLTSYQIFLNNARDSANN QITANKTESLEALNQAKTSAANNEITANQ TQALTNINEAKENANNQITENKQTAITNI NEAKNQSLSKH
HP1482	2471	TATTGATCCGCTTACACACGCAACCAATGAATTTATGCGGATAATTTCAAGCGCTCCAGTTGGCTCTCTAT GATGGAACCGCTTGAGCTTGCGCGCAAGCTTTTGAATGATAAAGGTGCGATGTTTGTGAGCATTTGATGACAACG AACAGGCTTATTAAAGTGCTCATGGACGAAGTGTTTAAATGGGGGGGTGATACTTTGTAGCGAGTATTAGTT G	2472	IDPPYNTQNNFIYADNFKRSSWLSMM ENRLEARKLLNDKGAMFVSIDDNEQA YLVLMDEVFNGGGVITL
HP0073	2473	GTTGATGCTCCACTATGCTGGAGAAATGGCTAAAAACGCAAGAAAGGCATTAAAGCTTAACTATGTAAGACCGG TAGCTTTGATTAGTCCCATATTATGGAAGAGCGAGAGCTGTAAAGACTGCGGCTGAATTTGATGCAAGAAGGG CGCACTCTTTTAAACCGGAT TCCTGATGGGACAAAACCTGTAACCGTGATACCCCTATTAGGCGCAATGGTAAATAGTTCCTGGTGGTGGTCTT AAAAATGAAGACATCACTATCAACGAGGCAAAAGCGGTAGCGTGAAGTTAAAGTGAAGCAAGCAAGCAAGCAAG TTCAAATCGGCTCACACTTCCATTTCTTGAAGTGAATAGATGCTTAGACTTGACAGAGAAACTTTCGGTAAAC GCTTAGACATTGCGAGCGGACAGCGGTAAAGTTTGAAGCTGCGCAAGAAATCCGTAGAAATTTGATTGACATTGG CGGTAAACAGAAATCTTTGATTAAACGCTTGGTTGATAGGCAAGCAGACACCAAGCAAGCAAGCAAGCAAGCAAG ACAGAGCTAAAGAGCGGTGTTTTCATGGCGCTAAAGCGGATGACAACTATGTAAACCAATTAAGGAGTAAGAAATG AAAAAGATTAGCAGAAAGAAATATGTTCTATGATGCGCTACTACAGCGGATAAGTGAGATTGGCGGATACAGA CTTGATCGCTGAAGTAGAATGACTACACCAATTTATGCGGAAGAGCTTAAATTCGGTGGGTAAACCCCTGAGAG AAGGCATGAGCCCAATCCAAACCCCTAGCAAGAAAGAAATTTGATCTAATCATCACTAACGCTTTAATCGTGGATTACA CCGGTATTATAAGCGGATATTGGTATTAAAGATGGCAAAATGCGCTG	2474	LMLHYAGELAKRKEKGKIKLNYEAVA LISAHIMEEARAGKKTAAELMQEGRTL LKPDDVMDGVASMIHEVGIEAMFPDGT KLVTVHTPIEANGKLVPGELFLKNEDITI NEGKAVSVKVKWVDRPVQIGSHFH FFEVNRCDFDREKTFGKRLDIASGTA VRFEPGEEKSVELIDIGGNRRIFGFNAL VDRQADNESKIALHRAKERGFHGA SDDNYVKTKE
HP0073	2475	TTTGAAGAGCAAAAGGATAAATCTTACAAGGTTGTTGAAGATACCCAGCTCAAGAACCCACATTATAGTCCGCG ATTTGCAAGGCAATGAACGCGTGTAAAGCAATGAAGAGATTCAAAAGCTCATCAAGAAAGAAAGCAAGCAAGCAAG ACGGCAGGAGCAAGCTTGTCCAGCTTAAATGAGGAGTAAATGAGGCTCAGGCTTGGCTTGGGAGCGCGA TTTTAGGAGCGCGCGGGGCGGATTTAGGGAGTATATTGGTAAAGCTTTCAATAACCTAATACCAAGCAAG AACGCCCAACGACCTACAAATCCCAAGCTTACCAAGCTCTCAAAATTCCTTTCTAAAGTGGCCCGAGTGC TTCAAGCATGGGCGGAGCGAGTAAAGGACAGAGCGGTTTTTGGCTCTAGTAGGCTACTAGTTCAACCGCGGTA AGCTCTGGGACAAAGGGCTTTAACTCAT	2476	LEEQDKSYKVEEYPSRTHIIVRLQ GNERVLSNEEQIKLKEEEAKIDNGTSK LVQPNNGGSNEGSGFGLGSAILGSAA GAILGSYIGNKLFNNPNYQQAQRTYK SPQAYQRSQNSFSKSPASASSMGGAS KQSGFFGSSRPTSSPAVSSGTRGFN S

HP0073	2477	CGACTTTTGGCAAGTTAGGGTTCAAGGGAGTGAGTAATTTGACTATCCATAAGGTGAGCGGCATGCGTATTTT CGCTCAAAGACAGCCAGTCGGTTATTAATGCGTGTCTTTAAAGGGAACGCTAACAGGCTCAAATTCGCTTTAAAA GAAGGCGAGGAGTGGTTTGGGGTATTAGCGTGTATGTCCTCAAGGGGATATCAATCAATCAATGCTTTGA AATAGAGCCTAAGGATATAGTTCACTTAACTTATAGCAATTAAGAGAAATACGCCTTAAGGCTATTTT GATGAAGAAATAAATACCCAAACCGCATTTCTAAACGAGTGGCAGTCATCACTCTCAAAATTCAGCCGCTTGG CGGACATGAAAGATCGCTTCAACGATGGCGATGTGTAAATTTGATCAACACCTTAATGCAAGGGGA GGCTGCGTTCAAGCGTGGTGAAAGCATCGTTTATCGGATAGTTTTCATGACACAAACGCTTTTATGATCGGA TTGTAGTGGCTAGGGTGGGGAGCATGGAGGATTTGATTTCTTCAATGATGAAATCGCTGATGCTCTGTAT TTGGCCAAACCTTCAGCATGTCAGCTATTGGGCATGAGAGCGATTTTATTGAGCGATTTAGTGGCGGATTAAG GGCTTCTACGCTTCAACCGCATGGAATTTACTCCAGCAGCGATGAATGTTGCAAGACCTTAGTGGTTA ATGTGAAATGACCGCTCGTTTAAACCTTGTCTCCACCAAAAGCGCATTTAGAGCATTAGTGGCTTCTTTAA AACGATTGAGTTTGAACAACAGCACCATTTAAACGCTTTAAACCTAGAAATTAACATCGCCTAGAAATAAAC TCTAGAAATTTTACGCTTTAAACAAACGCTTTTAGAAAAATCTCTACTCAACATTAACAAGCCCTTTTACAAACTA AAACAGAGCGATT	2478	TFLQVRVQGEVSNLTHKVSUGHAYFSL KDSQSVIKCVLFGKNANRLKFKALKEGQ EVVFGGIVVYPRGDIYQINCFEIEPKD IGSLTALAEQLKEKRLKGYFDEENKLP KPHFKRVAVITSQNSAAWADMKKIAS KRWPMCELVCLNTLMQGEQVQSVVE SIVYADSFHDTKNADFVAVARGGSM EDLYSFNDEKIADALYIAKTFSMSAIGH ESDFLLSDLVADLRASTPSNAMEILLPS SDEWLQRLDGFNVKLHRSFKTLLHQK KAHLEHLVASLKRSLSFENKHLNALKL EKLKIALENKTLFLRFFKKTLEKISTQT LTSPFLQTKTERLN
HP1449	2479	GGAAGAAAAACCCCTAATGGCATTCAAGCTAATCCCTACCCAAAAAGTGGGGCTACTACCACCAATTCGTTCAAT AAAAACCCCATTTAATGCGGATGTGGAGCTTAGATGATGTGTTCAATCAAGCGAATGCAAGCGTGGTGCAACG CATTTAAAGCCCTATCTAGTCTGCTCGTGTGTCGCCAACTGTAGTGGGTTTCGCTCAATCTTTGTATCA ACATGGCAAGCTAGTGAAGCGGACCACTAGGGGCAACGGCTTAGAAGGAGAAATAGTTCAGCGCAACGCTAAACAC ATCGCTAATATCCCCACGCTATCGCTTAAATGGAGAAATAGAAATCAGGGCGGAAGTATCATTTCTAAAGGAT TTTGACGCTTTGAATCAAGAGCGCTTAACGCTAATGAACCCCTATTGCTAACCCAGAACGCCGATCAGGGAG TTTGAGGCAACTTGATAGCGAATCACTAAAGCGTAATGCAATTCCTTGGGCGTGGGCAAGCATTTCTTT AAATTTTAAAGCTTTAAGGAGTGTGATTGCTGCTGTTAGGTTTATAGCGCCATTCAATCTTAAGCCTAAAC AAAAACCAAGAAATAGAGACAAATACACACCCCTAATAGAGAAAGGAGGCTTTTTCGCCCTTTAGACGG CATGGTGATCGTTGTGAATGAATTAATATCAAAAGGAGCTAGGCTACACGCAAAATCCCTAAATTCGCTTGGCG TTATAAATCCCGGCTTTAGAAAAACACACCAAAATTTAGGAGTCAATTAACCAAGTGGGCGGCGGCGGATCA CACCCTGCTCTTTAGAGCCTGTGGAAATGCTGGAGCTATGATTAATAGAGCGACCTTACACAAATTTCTGAA TTGAAAAAAGAAATATCATGCTCAGTGATAGGTCGTTGTCATTAGAACGGCGGATGTGATCCCTAAATCATCAAGC CTTTAGAAATCTTATA	2480	EEKNPNGIQANSPTQKVGAATTNSFNK NPHLMRMWSLDDVFNQSELQAWLQRI LKAYPSASFVCSPKLDGVSLNLLYQHG KLKVAATTRNGLEGELVSAKAKHIANIP HAAYNGEIEIRGEVSIKKDFDALNQER LNANEPLFANPRNAASGSLRQLDSEIT KKRKLQFIPWVGKHSNLSLFSKECLD FIVSLGFSAIQYLSLNKINHQEIEDNYHT LIREREGFFALLDGMVIVWNEINIKEL GYTQKSPKFACAYKFPALFKHTKIVGVI NQVGRSGAITPVALLEPVEIAGAMINRA TLHNYSEIEKKNIMLSDRVWVIRSGDVI PKIIPLESYRDGSGQHKIERPKVCPICS HELLCEEIFTYCNLNC:PARLKESLIHF ASKDALNIQGLGDKVIEQLFEEKLJFNA LDLYALKLEDLMLRDKFKIK
HP1449	2481	TGTGATTGATGGCGGATAAGATTAAAGTTACCATCCAGGGAGCAATAAGAATATTCGGCCACTCTAGTAGGCA CCGATTCTGAAAGCGATTAGCGGTGATTGCGATCACTAAGACAAATCTGCCACGATCAAAATCTCTGATCTAATG ATATTTAGTGGCGGATTGGTTTGGGATTGGTAACCTTTTGGCGTGGGGAAGCGTTACGCAAGGCAATTGTT TCAGCGCTCAATAAAGCGGATTGGGATCAACAGCTATGAGAAATTTTCAACACAGACGCTTCCCATCAATCCTGG AAATCCGGCGGCTTTAATTGATAGCCGTGGAGGTTAGTGGGATTAATACCGCTATTATCTCTAAACCTGGGG GCAACACGCGATTGGCTTGGCATCCCTTCAACATGGTTAAAGATCTGTAAACCACTCATCAAAACCGGTAAG ATTGAAAGAGGTTACTTGGCGTGGCTTGAAGATTGAGTGGCGATTGCAAAATTTTGTGTTGATGATCAACAAAGG GGCGTAGTCATTAGCGTAGAAAAAGACTCTCCGGCTAAAGAGCAGGATTTGTTGTTGATGATCAACAAAGG GTCAATGGGAAAGGTTAAACACGATGAGTTAAGAAATCTAATCGGCTCCATGCTACCCAAATCAAGAGTAAC CTTAAAGTCAATTAGAGACAAAAAGACGGCTTACCCCTACTAGCTGAAAGGAAACCCCTAACAAAAAGA AACCATTTCTGCTCAAAACGGCGGCAAGGCCAATTGAACGGGCTTCAAGTAGAAGATTTAACTCAAGAAACCAAAA GGTCTATGCGTTGAGCGGATGATGTTCAAGGGGTTTATGCTCTCAAGTGAATGAAATTTCCCGAGCAGAGCAAGCC GGATTTAGGCAAGGTAACATTATCACAAAAATGAAGAGGTTGAAGTTAAAGCGTTGCGGATTTTAACCATGCTTTA GAAAAGTATAAGGCAAAACCC	2482	VIDGADKIKVTIPGSNKKEYSATLVGTD ESDLAVIRITKDNLPKTFSDSNDISVGD LVFAIGNPFGVGESVTQGVSNLNSGI GINSYENFIQTDAVINPNSGGALIDSR GGLVGINTAISKGTGNIHGIFAIPSNM VKDVTQLIKTGKIERGYLGVGLQDLS GDLQNSYDNKEGAVVISEKDSAPAKA GILVWDLITEVNGKKVKNITNELNLIGS MLPNQRVTLKVRDKKIERAFTLTLAER KNPNKKTETISAQNGAQGLNGLQVED LTQETKRSMRLSDDVQGLVSVQVNE SPAEGAGFRQGNITKIEEVEVKSADF NHALEKYKGPKRFLVI.DLNQGYRIILV K

HP1449	2483	GAAGATTAGGCTCGTTTTTGAAGACGCTTTTGGGTTTGGCGTAGGGGAGTAAAGGCCAAAAAGCTCTATCGC ACGGATTATTTGCAAAACCTTGAATTGAGTTTCAAAGAAGCGGTTTTTGCTGTAAAAAACCATTAAGTCCAATA CCAGAGCGTTTGTGAAAGTTGCGATGCGACGGGCTAAAGACAAAGCCCTAGAGACTTGAAGCAATGCAATGGG CAGGGCAGGTTTATGCTCAAGGTTTTATGATTTTGCACAACTTGTGGGCGTGTCAAGGCAAGGCAAGA TCGTTAAACCCCATGCCAAGCGTGCAAGGGTAAACCTATATCCTTAAAGATGAAGAAATTGATCGGATAATCCCTG AGGGCATTGATGATCAAAACCGCATGGTGCTTAAATAAAGGCAATGAATACGAGAGGGGAAAAAGAGGGGATTG TATTTAGAAGCGCAAGTCAAGAAGATGAGCATTTCAAG	2484	EDLGSFFEDAFGFGARGSKRQKSSIA DYLQTLLESFKEAVFGCKTKIKVQYQS VCESCDGTGAKDKALETKQCNGQG QVFMROGFMFAQTGACQCGKGVK TPQACKGKTYILKDEEIDAIPEGIDQ NRMVLKNKGNEYEKGRGDLYLEAQV KEDEHFK
HP1202	2485	GTATTATGAGTTTTTCTTATCTCCCTAAGGAGCGGGAGCTTTTGAGAGCTTTCTTTAGACGCCACGCATCTAGC ATTAGAAGAATCTAGCTTAGAGAAATTTAAAGCGTTTGACGATAAAGAAACCAATTGGGTTTTATAAGCCAAATCCAATTG GCATTATTCGCCACTCATGACCCCTTAAAGAGATCTGAAAGAAATTTAAAGAAACCTCCACATCTCAAAAAT TTCGTTATTTACGCTCTCAAAGGATTTGAATAACTCGCTCAATTCAGCATTAGAAGCGTTTTGTTGAATTTAAAC AAACCTGCAAAGTGAGTTGATTTTTTCTATCTTTACGCAATCTGGCTTCAAAAGATTGGCTAGAAGCCTACAAAC AAGCTATTTTGCCTGCAATGCACCAAAATTTACATACACCTAGCTGGCATCAAAAGCCAAAGCCATGTTGTTACAA ATGATTGCATAATGATTGATCCGGCTTTGGCCTTTGGATCAGGCCATCATGAAAGCACTTCTATGTGTTGGAACTGC TCTCTGACATTGATTTAAACGCAAAACGCCCTAGATGTGGTGTGGAGCGGATTTTAAAGCATCGCTTTTAAAAA AACAAAGCGGTAGCGCTTAGTAGCTTGCATACGGATAGTTAGCCGTTGAAGAAACCTTAAATAATTTAGCTTGA ATCAATACCCCTATTAGTGCAAGATAAAGTCAATTTATGGCTCTACGCAAAATTTGAAGGCGGTTTATGATGTTATTGT GGCGAACCTTGCTGCTGATGATTAAGAGTTTGTATAGTGAATTTGTGCGGCTTTGTAACCCACACTCTTATTTTATC AGGATTTTAGAAACCCATTTAAACCTGTTTACAGATCTATTATAGGATTTAGGTTTTAGAACAGCGACAGCGT AACGAATGGTCTCTAAATTTGCTTAAAAACAACCAATAAATTAGGATTATAATGAACCAACGAACGAACCTA AAAAAC	2486	YEFFFFIPKERELFESFLLDATHLALE ESSLENLKAFFDDKETIGFISQSNWHYF ATHDPLKDKLENLKEKPPHLKNFVILR SQKDLNNSLIPALEAFCLNLKQNLQSE FDFFYLSRNLASKOWLEAYKQAILPVQ CTKFYHPSWHQKPSHVVTNDCIMIDP ALAFSGHHESTSMCLELLSDIDLKRK NALDVGGSGILSIALKKQGVSAVAC DSDSLAVEETLKNFSLNQIPLLVQDKVI YGSTQKIEGRFDVIVANLVADVIKSLYS EFVRLCNHTLILSGILETHLNSVLQIYNN GFEVLEQRQRNEWVALKLLKKQPIN
HP1322	2487	GGATAAGAGAACGCTAGGGAATATTTGTCGCTTGAAGGGAGTTTTGAGGGTTTTAGGGTTTTCTTTTTATGCT ATAATGGAAAAGCTCTAATCATTAAGCTATTTGCTAGGAGTTTGCATGCAAGAGTTTTAGGTTTTGGTGTGGTG GGAAFTTTGCAGGGCATTTGGAGCAAGCAGGAGAGTCATAGTTTATTAAACATGAAAGCGAAGAAAGGACGCC CCTAAGGGGCTATTCCTTTTATATCCCTATGAAATTTGTTATTTGGGCGTGTGTCATTGATAACCATAGATTA TTTTGCCTAGTGATGATTAAAGGTTGCAAGCAGAGCCAGAAATCGCTTGAATGCGATGTTAAATACGATGAAA AACATTTGGTTGCAAGCTCGTGCTAATTTTTTCATGGCTTTAATGACGCTTCTGTGCGCAATTTAGACGCGCAA AACTCTCCCAAAAAAGAAATTTTACCGGCTTCTAAAGGTATAGGCAGAAATGCCATTGACAGGTTTGTGTTATG GGGGGTGTGAACAATTTCTCTATCGGCTTTTTTTGAATACAATAATGTTTGGCACATTTATGGGAAAAACAGCA AATTGCTCAAATACGAGTTTTTTTATCAAAAGCTTTTAGATTGGATTAAAGCCAAATTAACCAACCAAGATGGCGA CTCTTTAGAGGCTCTAAGACCTTTTTTAGAGCGCCATAATTTCCCACTAAAATGATTTTTCGAATAGGGGCTACCCC TTATATGCCCTTTGGCGAAGAGCATTTTTCGCAAAAGCGGATGAGGIGTGAICGTTGCTTACAACCATTTAC GATTCAGGGGGGCTGGCACAAGCAGCAACATGAACATGAACGAAGTGATTGCTAATTTGGCTTTAGAATACATGG GGCATCAAAAGGGCGAGTATCAATTTTGCACCCCAACGACCATGTCAACCGCTCTCAATCCACTAATGACGCTAT CCTAGTGGCTTAAAAATCGCTATTTATGAGCGCTTGAACAATCTAGTCGCCCCCATGAAAGCCTTAAGGGATGCTTT CGCTCAAAAGGCTAAGGAATTCGCTCATGTGATTAAATGGGCGCACCCAGCTTCAAGACGCTGTGCCTATGACTT TAGGCCAAGAGTTTGAACCTTATGCTTATGCTTATGAGGATATTGAGCAGGTTTGAACGCTAGGAATTTGGGTA AGAGAGCTTAATTTAGGGCGCACGGCTATTGGCACAGGGATCAATTCGACCCGGATTATCGCAGTTTGAATTGAAAA GAAATCCAAGAAAGTAAACGGCGCCCTTTTGCATGGCTAATAACTGATTGAAGCCCACTCAAAGCACGGGGCG TATGTGCAAGTAGCGGGGTGTTAAAGCGTATTGCGGTGAACCTTTCTAAGGTTTGAACGATCTCAGGCTACTCAG TTCAGGCCCTAGAGCCGGTTGAATGAATGAATCAATTTGCCATAAATGCAGCCGGTAGTTCTATCATGCCCGTAAAG TCAATCCGGTATCCCTGAAGTGGTCAATCAGGTGTGCTTTGCGGTGATTGGGAATGATTTGAGCGTGGCGTTAGC CGCAGAAAGCGGCGAGTTGCAACTCAATGTGTTGAGCCGGTATCGCTTACAAGCTATTCCATTCTTTGTGATTT TAGGCGGTGCGATTGAAACCTTAAACGACTAAATGTGTGAAGGCATCAGGCTAATGAAAAAGATTGCCCACGATTAT GTCTTTAACAGCATTTGGCATTTGTTACCGCGCTAAACCTCATATCGGCTATGAAAAATCCGCTATGATCGCTAAAGAA GCCTTAAAAAGCGATCGCTCAT	2488	DKENAREYLFA
HP1322	2489	GATTCAGGGGGGCTGGCACAAGCAGCAACATGAACATGAACGAAGTGATTGCTAATTTGGCTTTAGAATACATGG GGCATCAAAAGGGCGAGTATCAATTTTGCACCCCAACGACCATGTCAACCGCTCTCAATCCACTAATGACGCTAT CCTAGTGGCTTAAAAATCGCTATTTATGAGCGCTTGAACAATCTAGTCGCCCCCATGAAAGCCTTAAGGGATGCTTT CGCTCAAAAGGCTAAGGAATTCGCTCATGTGATTAAATGGGCGCACCCAGCTTCAAGACGCTGTGCCTATGACTT TAGGCCAAGAGTTTGAACCTTATGCTTATGCTTATGAGGATATTGAGCAGGTTTGAACGCTAGGAATTTGGGTA AGAGAGCTTAATTTAGGGCGCACGGCTATTGGCACAGGGATCAATTCGACCCGGATTATCGCAGTTTGAATTGAAAA GAAATCCAAGAAAGTAAACGGCGCCCTTTTGCATGGCTAATAACTGATTGAAGCCCACTCAAAGCACGGGGCG TATGTGCAAGTAGCGGGGTGTTAAAGCGTATTGCGGTGAACCTTTCTAAGGTTTGAACGATCTCAGGCTACTCAG TTCAGGCCCTAGAGCCGGTTGAATGAATGAATCAATTTGCCATAAATGCAGCCGGTAGTTCTATCATGCCCGTAAAG TCAATCCGGTATCCCTGAAGTGGTCAATCAGGTGTGCTTTGCGGTGATTGGGAATGATTTGAGCGTGGCGTTAGC CGCAGAAAGCGGCGAGTTGCAACTCAATGTGTTGAGCCGGTATCGCTTACAAGCTATTCCATTCTTTGTGATTT TAGGCGGTGCGATTGAAACCTTAAACGACTAAATGTGTGAAGGCATCAGGCTAATGAAAAAGATTGCCCACGATTAT GTCTTTAACAGCATTTGGCATTTGTTACCGCGCTAAACCTCATATCGGCTATGAAAAATCCGCTATGATCGCTAAAGAA GCCTTAAAAAGCGATCGCTCAT	2490	IQGGAGTSTNMNMNEVIANLALLEYMG HQKGEYQFCHPNHDHVNRSQSTNDAY PSALKIAIYERLSNLVAPMKALRDAFAQ KAKEFAHVIKMGRITQLQDAVPMTLGQ EFETYALMVDRIEQVLDAARNWVREL NLGGTAGTGINSHPDYRSLEKKIEV TGRPFVMANNLIEATQSTGAYVQVSG VLKRIAVKLSKVCNDLRLSSGPRAGL NEINLPMQPGSSIMPCKVNPVPEW NQVCFAVIGNDLSVALAAEGGQLQNV FEPVIAKLFHSFVILGRAIETLTTCVE GITANEKICHVYVFNISGIVTALNPHIGY EKSAMIAKEALKSDRSIYDIALEKKILTK FQIDJIEKBNMISPHAEKKHKQ

HP1322	2491	GACGTTGGCAAGCAGCCAAATCCCAAGCCACITTAGCCAAAGAGACATTATAAGCGCGTTCAAGATTGTATGATAA TGGCGTGGCGAGCTTGCAAAAGCGGATGAAGCCTATGCGGCTTATGAAGCACTAATAACACGAGAGCGCGCT TACCAAAAGTATAAATGGCTTTAGGGGGCGGAGCTCTGAAGTAAGATTGCCGTAAGCTAAGAGAGAGCGCGG CTTTAGGGCAAGTGAATGAAGTGGAGCTTATTAAAGACGCTCAAGCGACAGCCCAATTGATGGGGAAGTGAGT AACGTGCTTTTAAGCGGTGGCGAGCTTAGCCCTAAGGGTTTCTCTGGT	2492	DWQAAKSQATLAKEITYKRVQDLYDN GVASLQKRDEAYAAE:STKYNEAAY QKYKMALGGASSESIAAKAKESAALG QVNEVESYLKDVKATAPIDGEVSNVLL SGGELSPKGFPPV
HP0113	2493	TTTAGAACTGGCTTAGGCTATCACTCATCAGTCTTGGGACATGAACAAGGGCGGATTGTTAGAAAGGATTA GGGTATTAGAAAAGATAGCGAGCGATTATGGTTTTTGATGCTCAATCCGGATCAGGGATAATTTGCAGCTC CCCCAACGCAATTATGAATCAAACTTAAAGGCATTGTGATTGGTGAAGGCATGGTGATGCCAGACAAGTTTTAGC CATGAATACCGGTTTTGTGAATAAGAAATTGAAGGCATTCTACTAAAGAGCGCGCTTTTGAATGGACGCTTTATG GATTGAACATAAAATAAAG	2494	LELALGYQLISLADMKQGGDLERIRGI RKKIASDYGFLMPQIRIRDNQLPPTHY EIKLKGIVIGEGMVMPIKFLAMNTGFV NKEIEGPTKEPAFGMDALWIETKNKE
HP1200	2495	TTGACTAGAGAGGGGTTTATGATCTGAGCTTTGAGCCTATTTAGCCTGAATGCGAACCGGAGCAAGCCCCATGC TTTGCCCTAGTGGGAAGGATTTTTAAAGCGGAGCACAGCATTCTTTGGATATGGGATCAATAACGAACGCTATTG CTCTGATAGGACTCGACGGCTTTTGGACCTAAAGATTTGTCTTTAAAGAGAGCAGAGTTTCAAGGATAAAGA GCGTCAAAAGATTTATGACATTGTGAAGAAAGCGCAAGAAAGGCTATTTCAAGGCATTAGAGCGGCGCATGACCCGTA AAGAAGCGGACAGCTTGGCTAGGGAGTGATTAGCGATTATGGTATGGCAATATTTCACTCACAGCA	2496	LTREGVYDLSFEPILALNANASKPHALP SAKDFLKAHSILLDMGIKERYCSDRT RTAFFDPKDFVKRECSFKDKERQKIY DIVKEAQEKASGIRAGMTGKEADSLA RGVISDYGYGQYFTHS
HP1200	2497	GAAGAAGTGTAGAGTATATTGGTTCAATTGAGCGTTTTAGAGCTTTCTGAAATGGTTAGAAAAAATTG GCGTGAGCGCGACTCAACGGTCTAGCGGGTGGCTGTAGCTGGCGTGACGGCTGAGAGCGAAGAAAA ACCGAATTTAATGTGATTTTGGCTGATAGCGGTGCTGAAAAAATCAAGGTGATTAAAGTGTTCTGTAATCACCGG ACTTGGCCTGAAAGAAAGCTAAAGACGCTACCGAAAAACCCCTCATGTGCTTAAAGAGGGCGTGAATAAAGAAGAAG CTGAACCATCAAGAAGAACTTGAAGTAGGCG	2498	EEVLEYIGLSVLELSELVKMFEEKFGV SATPTVAGAAVAGGAASEEKEF NVILADSGAEKIKVWREITGLGLKEA KDATEKTPTHLKEGVNKEEAETIKKKL EEVG
HP1563	2499	GTTTTTAAAGACGGCAAGCCTTTTCAATTGGAATTTAAGATGGAATGAACAATCTTGTAAACGATCACTTTTCTCAAG CAGAAATCAACCCACCATTTGCTAATGAATCTTTGTTTAAAGCCTAAAGATGAAACATTTGATATTGTGCGCCAATG ATTTTTAATGATTGATCTTGTAGCAAAAGTTAGCTAAATAGACAAACTTTAAATTTATGGGCTGACTTGG ATTTGACAGATTCTTGTGCGACAGATAGCATGCCAAGCGTGTGTTAAACAGCAACAAATAACTGTAAACAA CACAGATTACGCTCCAGCTTACGCTAAAGCTGCGTGAGTTAATCTCTTTTGGAGCTGACTGATTAGAAATTTCTAGC GTTTTAATCGCTCCATAACCTTAAGCTAGACGCTTTTAAAGGTGTTGCGCTTTTAAACTAAGAAACAAGAACTCTTG AACTATCTCAAGTTTTAGAAAGTTGGACAGAGCTAGTTTAAAGGCTAAAAAACCAACCAATTTTCTAAGCATTGTA GAAGTTTGTGTTAGGGCAAGATTTTGGACTGGGTTCGATTTCCACAGCTCCACCATATTAAAGATATCATTTT TAAGCGTATTAAAGGAAGTAAATGCAGAGTTTTCTCTGTTTTAGAGGTGGCGTTGCCCTTTTATTTGTGAGT GCTTTAGCAGCGATTGATATTGATGAAGTGACAGAAAGCTCAAGCTAACAGCGTGAAATTAAGCGATCAGTTAGTGAG CCTTAGCGGATAAGCTTTTAGAAAAGCGGTTGATAGGGGGCGCAATACCGATCACTTAAAGATCTTAACGATTGCG ATGAAAAAATCAACATTTGCGCTTGATCTTAGAGCCTAAACCTAAGGATAAGAAATAACCCTAACCTAAAGATCA TCAAGGCTCTGAAACGATTGAAATCGCGGAAACGATTAAAGGCTTTAGCGGAGCGCGTATTTCCCCCAAGACGCG CTAGACGC	2500	VFKDGKPFSLFKDGMNNLVITIFSQA EINPTIANEIFVKPKDENIDIVRQ

HP1563	2501	ATTTTACAAAAATAGACGCCCATGAACGGCTTTGAATTGAAGAATATCCAAAATCTTTTCACTTCAAGGGTTTTG AAGTGAGCATCACGCAAAAAAGCGCGATTATGGAGCGGATTTGATTATAGAAAAGACGGCATCAAGTGGCGGT TCAAGTCAAACGCTACTCGCATAAAGTTTCCGCCAAAGCCATTCAAGAGGTGCTCTCTTCTAAAGCTTATTACGCTTG CGAAAAAGCTTGGTGATCACCAACAGCTATTTACGCAAGCCGCTCAAAAAGTGGCTCAAGCTAAAGTAAAGTCTCT TGATTGACAGAGACGAATGGTGAGGTTTTTGAACGAAAGAGATGAACCGATCCCATCAGATCGTTTGTCTCAAG TTCTTTTAAATTTTGTGTAATTGATGCGCTATAATGCCAAAATTTAGCGTCAATTTCTGCTGGATAAGGGGATTT AATGATTGAGTCTGTTGCGATCAAAAAATTTTAAAGATTTTAAAGACACTAAATTTGATGGTTTACCAAATTAATATTA TCACCGGCCAAACAATCGGGCAATCCAAATTTGTTAGAGCGTTGATTATTTGGTAGGTAATCCATGCACCCAT GCACATAATGATTAGAAATTTATGACAAATATACGCAAGAGCCCTTAACATCAGAAATCAAAAAGCTTAATGTTTTATGG TTTAGACACTAAGGAAGAAATACAGATTGTACAACTTTAGACAACATCAGACCTTGGACTTGCATAATAAATTCATA GCTAGTGAACCAACCAAGGTAATAGAGTGCATAATATACCTACAGCAGAACAACTCAAAATGCTCTCAGCTTAAT TTCACCTCTTAAAAAAATAATGAAGAAATCTATAACGATCATTTAAATATTGCTAAAGTTCCCTAATTTCCACCAATTC TAATCAGTCAGGCTACAACAGGCAATTTAAGAAATTTGATTCTAATCAATTCGCAAAAATTTTACCCCTTGAAAGCGCT GTCAT	2502	ILQKIDAMNGFEFEYYSKIFFTSKGFV SITQKSGDYGADLIEKDGIKWAVQVKR YSHKVSPKAIQEWSSKAYYACEKACV ITNSYFTQAAQKLAQANEVLLIDRDEW VRFLNEKR
HP0800	2503	AAGGCAAAAAGATCCCTTGAAACGCCCTACTATGCCCTTATTATAGAGAGCTTAGAAAAGCTAGCTTGCAAGTGT TAGAATGTGAAAATTTTCAATGACTTATTATGATAGAGATTATAATAGAGAAATGTGAGATTTGCCCTTATTCGATGC TAAAAAACCTGTGAGACTTGTAGCAACAAGTTATTACCAAAAGAGCGAAGTTTTTATTGTTGCTCGAATTTTACAGAC CCTATTTTACCGACAACCTTATTTAAGGGGATTGAAGTGGTTAAAGCGAATGGGAGTTGCAGAGATTGCTAAT AATATATTGATTTTCATCATGACATACAAACAAGAAAGATTCTCATTAATAATAAAAGATTGGATCACTATAGGATAGA AATAGATTTAGAAAAGAAATTGACTATTTTCATACAAATGTTTTTAAATTAAGGTTCAAAAATGCTGAGTTTTATCAAGA AGATAGCATCATCA	2504	KAKKIL
HP0800	2505	CGCTTACATGGCGACAAGAACCTTACAAAACATAACGAACGACTGATCAGCTTTTGTGATCGGGTTTATGAGCT GCTCGGCAAGGCTGCCATTTATGTGCTGTTGTAGGCTCGTTTTCCCTTCAAGTGTGCTGGTTTGTGCTGTTTT GCATTTATATTTGGGGCGGTTGTGGCGTTAGTGATGGCCAAATTACTCAAATTAAGCGTGTAAAGGACAAACC GAATCTTTATCATGGAAATGCCAAATACCGCTTTCCAGTTGGAGAAATGCTATTTCAAGTATCTACACCAATCG CTTCTTACCTTAAAGGCTGGGACTTACATTTTAGTGGAGCGATTTTAACTGTTTATGCTCAATACCTTAA GGATGGCGCATGAAAGCTTATAACAAGAAAGCTTGTAGTGAATAAGGATACCACTCTTCAAGCGAAGCTAAA GAAGAAAATTAAGAAATTAACAAACAGAAATGGATAAAAGAAATTAACAAATAGCATTTAGGAAGAGCGGGCG TATTTAGAAAAGCTTTAGCCCTATGGATTTGATTGGCGTTGAGTGTGCTGCTTGAACCGGATTTATGGCTAAA GAGTGGTGGTTTCTACTTTGGCGGTGTTGTTTCTTAGGGGATCAAAATGAAATCTGACGCTTTTAGAGGGATT TTAAGAAAAGAGTCAGCGTGCCTAGCGGAATCGCTTTTATCGTGTGTTGATGTTTATATCCCTGTTTTGACGCG ACCATTAATTTTGGTAGGGAAGCGGAGGATAAAGTTGTAGCGTATTTATTCATCTTCAACCGTTGTAGCGTAT GCGTTTCTTGTAGAGCTTTTATGCGACTCAATTTGTTTAAAGGCTAGCCATAAGGTTTTTAAGCCCTTTA TTTGTTTAAATTCACCCCATTAGAAATATTAAAAATTTTATTTTCTTCCAATCTTTCTATAAACATTTCGCATTAT CGGTATTT	2506	AYMATRTLQNYNERLITLVIGFMSCSA RLPIYLVFVGSFFPSSSAGFVLCIYILG AWALVMAKLLKLSVFKGQTESFIMEM PKYRFPSPWRMVFYSIYTKSLSYLKKAG TYILVGAILWFMSPQYPKSDAAMKAYK QESLLVNDTTLSSEAKEEKLKELKTEL DKKLNKNSIVGRGGAYLEKVFSPMDFD WRLSVSLVTGFMAKEVWVSTLGLVFLSL GDQNEKSDAFRGLRKEVSPSGIAFIV FVMFYIPCFAATITFGREAGGKIFVAYL FIFTTVAYAFSLIAFYATQILV

HP0800	2507	CATTCAAGGGGCATTAGATACTAGGGAGCTTTTAAAGCCTACCAAGAGGAAGCTTGGCGGAAACCTTTGGAGCGT TTTGTGTTGTGGGATTGTGAGAAAGAGGATAACATTCAAGGCTTGAGTTTGATATTTATGAAGCGCTATTAA AGACTTGGTTTGAAATAATGGACCATTAAGCCAAAGATTGGCGGTGTGTTAAATGGCGACAGCTGGCGGA TGTTTGATAGGACAAAGCTCATTTTATGCGTTTCAATGGAAAGATAGAAATGCCTTAGAACTATACGAAAT TTTATTGAAGATTTAAGCATAAAGCTCCTATTGGAAATACGATTATCCATAATAACGCAATTTATGCTAAAGAAA GAAGCCACCTTTAAAGGAGCGGGCTTTTATGCTTAAAGGAGTTCAATGCAAGGATTAAGCGGATACAAAGATGTTGAGCGAAT AGCGGAGCGGATAGAGCGTCAAAAGGGATTATGAAGATTAAAGGATTAAGCGGATTAAGCGGATTAAGCGGATTAAGCGGAT ACTTGCTCAATCCTTTAGAAATTTTATACGAAATTTGCTGCTGATGAAGGATTAAATGAAGGATTAAGCGGATTAAGCGGAT GTGCGATGAATACCAATGCGATCTAGTCTGTTACTACAGGAGGACAGCGCTGCTTAAAGAGATATAACCCAGAAAG CCACAGAAAGGTGTGCCAAATAATGCTTCTGTTTGGAGAGCTTATGCCAATGACTAGTTTAAATATGTGCTTA CAGCGATCCTGTGCGCCAGAGCGCTGATTAGGAATAAGAGTTTGAATATCTCCCTGGTAAGCCAAAGT ATTAGAGAAATGCTTAGAGCGGTTTCCAGCGATTCTTATGCGTGGATTGATTAGGGAATTTATGCAAGTG AATGAAGAAACATTCAAGCGTTTGGCCCAACAATAGGATAAAATGCCGCTCACTCATTTGAATGAAGAAATC AGCCTAAATGGTGG	2508	IQGALDTRELLKAYQEEACAKNFGAFC VFVGVRKEDNIQGLSFDIYEALLKTWF EKWHHAKADLGVVLKMAHSLGDLVIG QSSFLCVSMGKNRKNNALELYENFIEDF KHNAPIWKYDLIHKNKRIYAKERSHPLKG SGLLA
HP0800	2509	GGTAGAAGTGGGATTTTGGACCCATAAAGAGAAATTTTTCATCAAGCGAATGATTGAAGGAATTAAGAGC GATTTTACAAGAAAGAGGGCTTAAAGAGTGGTGGCGTTTGGCGATAGCCCTTAATGATCATTTAATAGACAA TTTAAACACGCCCTTAAAGATGGCGATGTAATAGTTTGGCCACCGTTTGGGGGTAGGTGTTAAATCAT TCAAGGGCATTAGATACTAGGAGCTTTTAAAGCCTACCAAGAGGAGCTTGGCGGAAACCTTTGGAGCGTTT GTGTTTGTGGGATTGTGAGAAAGAGGATAACATTCAAGCGTTGAGTTTGTATTTATGAAGCGCTATTAAAGA CTTGGTTTGAAGAAATGGACCATTAAGCCAAAGATTGGCGTGTGTTAAATGGCGACAGCTGGCGGATGT TTGATAGGACAAAGCTCATTTTATGCGTTTCAATGGGAAAGATAGAAATGCCCTAGAACTATACGAAATTTTA TTG	2510	VEVRFPGPIKEENFFIKANDLIKELRAILQ EKEGLKEWLGVCAIALNDHLIDNLNPL KDGDISILLPPVCGG
HP0800	2511	AAACGAGCAAAACAGCAATTGATTGAAGGGGTTTCAGATTGATGGTTAAGGTGCTGAATAAAATAAGGCTTCTAT TGTTGCTCATTATAGATGAGGTGATCTAATAATTATGTCITGGGGCGAGAGCGTCCATCATTTGAGGCAAAAA ACTAAAGAGTTTTAAATTCAAAGGTTCGATAACATTTAAGGGGGTGTATTCTACCCCTTAAACATAAAG GTAACCTACGTTAAACATGACAAGGGGTTTGAAGAGGGAAGTTTACCCCTTGGCCATGCGTTTCATAAAGG AATTCATCGCTAAAGGATTTCAGCCCATTTCAAGCCATTATGCCATTGACATTACACGAAACCCCAAAATTC AAGGATCTGGAAGAAACTCGTGTGCAATTTAGCTTGTAGCCCGTCAAGTAATTGTTGATAAAATCGTTTGGCTCA CCACATGCTCAACCACTCCCTACCCACGAACTCCCGCTAAAGCAAAACCCAGATAAAACCTACGCTAGAGTGT TTTT	2512	NEQKQQLIEGVSDLMVKVLNKNKASIV VIIDEVDSNNYGLGGESVHHLRQKN
HP0800	2513	GGATTTATGCGCCTATTAGCCGGGCTTGCCCTCTAATAACAAATACTCTTAAATGGCTCCGCAAGAGCGGATCC AACTGCTCAGCTTTGAAGTGGTCAGCACTTTAACCATTTAGCCCCCTTAATGGTGGTAGGATCGCTCTTTAGTG GAAATCAATCATTACCAAGCGGTGGTTTGTAGACTGGCTTGTGTTAAGCAGCCTTAGCGTTTGTGTTTTG ATCGCAAGTTATGCCGAATTGAATCGAACCCCTTTGACTTGTAGAGCATGAAGCCGAGATCGTGGCGGGTATT GCACCGAATACAGCGGCTTGAATGGGCGATGTTCTTTTACGGAATACGCGCAATTTATCGCTTTTCTTTGTGA TTTCTATTGTGTTTTTGGGGTTTAAAGCATGGGCTTTATCCCTGGAGGCATAGCGATTTTGAATGAAGCGGGCT TTTTGTCTTTTATCCATGTGGGTTAGAGCGGCTTATCCGCTATGTCGCCAGACCACTGATGGATATGTGCTGA AAATCATGCTGCTTTAGCGTTATTGAACATTGTGCTAACGGGCAATTCATTTTAAAGGAGGTTTTATGGCCA AACAAAGATAAGCAACTTCTTAAACGAGCGGAGTCCATAGTGGCAGCGAGCTTAAAGACACCGCTTAAACG AGCTTGGGTTTGGATCTATTCAAAGGTTAGGGCTTACG	2514	IYAPILAGLASNNKYSLIGSAFATIQLLS FEVSTLTILAPLMVWVGSLSLVEINHYQ SGGFLDWLVFKQPLAFVLFLIASYAEIN RTPFDLLEHEAEIVAGYCTEYSGLKWG MFFLAEYAHLFASFVISIVFFGGFNAW GFIPGGIAILIKAGFFVFLSMVVRATYP HVRPDQLMDMCMCKIMPLALINVLGTG IILI

HP0800	2515	TGACGCCAAGGCTCAAGAAGTGGCGATGTCGTAGCGATGGGTAAACCCCTAAACGATAAGGGCGCTTGAAACAC TCCGTGCATGAGTTTACATTAAATCCCCGGAAGAAATCGCAAGCTCTTGCAGATATCCAGAGCTTTAGAAAAC ACCAAGAAATCGCTGATAATGCGTTTACAGATTGATTAAAGACGATAAAAGAACCCCAACCCCAAG CTTCAAAATCACTAAAGCTTACGCTCAAAATGAGGGCTGAATTTGAAGATGACGCTTCTTATTTGCTATAAGGC TAGAGAAGGCTTGAAGAGCGCTTAGTTTGTAGTACCAAAAGAAAGCATGATCAATATAAGAGCGCTTAGAAAAG AAATTGAAGTCATTACGAACATGAAATCCAGGGTATATGCTGATTGTGGGATTTATCCGTTATGCTAAGGAAA TGGGCATT	2516	DAKAQEVAMCVAMGKTLNDKGRKHS VHEFYKSPPEEMAKLFADIPALENTQE IADKCVLEIDLKDDKNPPTPPSEKFTK AYAQNEGLNFEDDASYFAYKAREGLK ERLVLPKEKHDQYKERLEKEIEVITNM KFPGYMLIVWDFIRYAKEMGI
HP0353	2517	TTTGATTGATGCTTTGAAAAAACCGATGAGCTTTCAAGCCATTGTAGTAAATGCAATGCAGTTGAAAAAGC CCAAGAAGAGAGTAAAGTTTGTATTGAACGCTAAACGACGCTATAAAATCGGCTTTAAAGAGGGCGAAGAAA AAATGCGTAACGAACTCACTACAGCGTGAATGAAGAAAAAACCGCTTTTGCATGCGATCACCACTTTAGATGAAA AAATGAAAAATCAGAAAGATCATTTAATGGCTTTAGAAAAAGGAATGAGCGGATTGCGATAGATATAGCTAAGAAG TGATCCTTAAAGAGTGAAGACACAGCCAAAGTAGCCCTTGGCTGAAGAGCTTTTAAAAACGTTTGTAG ACGCAACGGATATTCATTTAAAGTCAATCCCTTGGATTACCTTATTTAAACGAGCGTTTGCAAAACGCTTCTAAAT CAAAATTAGAGAGCAATGAGGCTATTTCTAAAGGAGCGGTTATGATCACTAGCTCTAATGGGAGCCTTGATGGGAATT TAATGGAGCGCTTTAAACGCTCAAGAAAGCGT	2518	LIDCLLKTDLSSHVLKLMQFEKAQ EESKVLLENKNDGYKIGFKEGEEKMR NELTHSVNEEKQQLLHAITTLDEKMKK SEDHLMALKEKLSAIDIAKEVILKEVE DNSQKVALALAEELLKNVLDATDIHLKV NPLDYPYLNERLQNASIKKLESNEAISK GGVMTSSNGSLDGNLMERFKTLKES
HP0353	2519	ATTCAGCCCTTAAAAATGAACATGTTTTAAAGACGCTTTAATCTCTATGCAAGAAAGTCTATGAAGAAGATAAAA AAACCATTTGATCTTTGCGGATGAATCAATCAAGCGAGAGAAATGAATTTATGAAGAGGAAATACCGCTTGA TGTTGGGGAAGTCGCTGACATGAGCAGCGTGAATAAAAGTAGTTTTAAATTAACGCCCATGCTGAGGGCTTATTA GCGGTAATTTAGGTGAATCTAT	2520	ISAFKNIENMFLKDALISMQEVYEEEDKK TIDLLRDELNQAREEIEFMKRYRLMW GKVADMSSVNKK
HP0353	2521	CCTAAATCCTTAAAAACGCGCTTGATCAGCATTTTGATCTATCGCTCGCTATGGGAGCGTGAAAAAATCATGCC CAATATCGTTATGCGGATGTTTTAACCCGCTGTGGCGATGTGGTGAAGATTGAAAAAGCGATGGCAGCGAAT GCGTGGGAATGTTGGTGGCAGAAAGAGCAGTTTGGTTTACGCCCTTAACTTTATAGAGGGGCTAGGGC TGCGGATAAGGTGCTGTTTTAAAGAGGGGTGAATTTCTGTGGCGCTAATCTTTAGGGAGGGTGCTTAACC CTTTAGGGCAAGTCATTGACAAATAAGGGGCGCTAGATTATGAACGATTAGCGCCTGTCAATACACGCTATAGCC CCTTTAAAGAGGC	2522	LKSLKNRLNQHFDSLPRYGSVKKIMPN IVYADGFNPVSGDVVKIEKSDGSECVG MVVAEKEQFGFTPFNFIEGARAGDKV LFLKEGLNFPVGRNLLGRVLPGLQVI DNKGALDYERLAPVITTPVPLKRG
HP0801	2523	TAAGAATAAGCATTCACAAACATTGCCCTTGATATTGAACCCCTAAACCAAGCCCTAAACACACTTATGATGT GAGCGCAATCAGCTTTGGTTATACCTAAATTCGAACGATTACGCTTACTCCCAAGCAACGAGCTTTGGGA ATGGCTATGGCCCTAAATAGTGAACCAAGGGGTGAATTAAGAAAGATTTAGAGTCGCTAATTAAGTGGGAG CACACCAACCAAGCCCTCTTGTAAAGATCTATTACAAACATGCGCGCATCACTTATGAATTTTAGACATTGAAA AAGCGGTTTTGAAGAAAGTGCATGCGGCGTATTGATCCATGAGAGTATCTTGGATTTTCATAATGAATTAGAAG TGGAAGAAAGAAATTGGGATGTTTGGAAGAACTCAATTGAAGTGGATTGCCCTTAGGGGCGATGGCGATC AGCGATCTATCCCTTGATCGCGGATTTTGATTAAAAAGGC	2524	KNKAFHNIALDIETLNQALKNYDVSA ISFGLYPKIANDYALLPTATSFNGNGYGP KLVKKKGKVKLKKDFRVALSGEHTTNAL LFKIYKHARITYMNFIDIEKAVLEEKVH AGVLIHESILDHNELEVEKELWDVWK ELIEVDLPLPLGGMAIRRSIPLYRAILKK
HP0801	2525	GGGCTAGGTGTTAAAAATCATTCAAGGGGCATTAGATACTAGGGAGCTTTTAAAGCCTACCAAGAGGAAGCTTGGC CGAAAAACCTTTGAGCGCTTTGTGTGTTGTGGGATGTGAGAAAAAGAGGATAACATTCAAGGCTTGAGTTTGATA TTTATGAAGCGCTATTAAAGACTTGGTTGAAAAATGGCACCATAAAGCCAAAGATTGGCGGTGTTAAATGG CGCACAGCCTGGCGATGTTTGATAGCAAAAGCTCATTTATGCGTTTCAATGGGAAAGATAGAAAAATGCC TTAGAACTATACGAAATTTTATTGAAGATTTTAAGCATACGCTCTATTGGAATACGATTTAATCCATAATAACG CATTTATGCTAAAGAAAGAGCCACCTTTTAAAGGGAGCGGCTTTTAGCTTAAAGAGGAGTTCAAATGCAAAACGAT TCATATAGCGGCTTTGAGCGCGGAGGATAGAGCGTCAAAAG	2526	G

HP0801	2527	TTTAAAGCTTTAGCGGGGATAAATCTTTAACAGTGGCAAGGGGCATTATTATGGGGCAAAAAGAACGGGTTGAA GCGTTAAAAACCCCTTTATAGAGTTTAAAGGTGGTAAATCACGCTCACCTTCTGCTTTTTCAGGCCTAAAA GCATGATAAATCATCAAGAGACATTACATCCATCGCTTATTGAACCAAACTAAAGACGCATTATTGCAAAAAGCC CTCAAACTCTAGCTCTTTTAAAGCTTTAGAAATTGAATGTAGCATAGCTCTAGCTTTCTAAATAGGGAATTTGT TTGGTAGGGAATTAGAAATCTTTTGGGTGAAATCCAGCCCAAAACACCCGCTGCTTTAAATAGTGAGAAACCTTTAT TAAAGCTTTTCCAAAAGGCGTTATCGCAAGGATTTTCATGCGAATTCGTGCTTTGAAGTCTTTAGCTTGAATGAAA AAGATTTTGA AAAAATCGCTCTGTTTGAAGAAATTTCTTAATAAGCTTAAATTCGCTATAATAAAATTTCTTTTA AACGGCCCATATCCCCACAAAACGCTAGAGAAATGATAGAAAACGACAGACATCAATTTAAAGGAACCTTAAGAATG GAAAAATCAGCGATCTTATAGAAATGCATTGCGTATGAAAAAATTTGCCTAAGAGATGATTTCAAAAAGTGA	2528	LSFSADKFFNSAQAGIIMGQKERVEAL KNHPLYRVLRVKGKLTLLFCSLKAWIN HQEDITHALLNQTKDALLQKALKLYAL LKPLELNVSIASSFSKIGNLFGRELESF CVKIQPKNTRALNSEKLYLKLQKGVIA RISCEFCFEVFSLNEKDFEKIALVLEEI LNKA
HP0806	2529	TAGCATGCTAGTGGGGTAGCCGCGATCGCTCATCTTCTTAGAGCATGATGACGCCAACCGTGCCCTTAATGGGG ACTAACATGCAGCGCCCAAGGGTGCCCTTATTAAGAGCGACGCTCCCATTTAGGCACGGGATTGAAAAAATTAT TGCTAGGGATTCTTGGGAGCGATCAAGCCCAATCGCGAGCGTTGTAGAAAAATTTGATCTAAAAATATTTATAT TTTAGCGGAAAGCAAGAGAGCCCTATATTGATGCGTATCTTTGCAAAAAAATTCGCGACCAACCAACACACCCAG TTTCAATCAAGTCCCTATCGTTAAAGTGGCGATAAAGTGGAGCGCGCAATCATCGCTGATGCGCCCTAGCATG GATAGAGCGAGTTGGCGTTAGGAAAAATGTGCGGTTGCGCTTACCTCCACCAATTTATGAAAAAGAGTGGATGCTA CGATCGTGTGAGTGAGTGATGATCAATCAATGATATTTTACCTGATGTAAGAGAGAGCGCTCGCTCATCTTGAT GGGAGCTTAAGCATGGTGTGGAAGAAATTTACCGCTGATATCTGATGTAAGAGAGAGCGCTCGCTCATCTTGAT GAAAGCGGGATCGTTAAAGTGGTACTTATGTAGCGCTGGCATGATTTTGGTGGCAAACTTCTCTAAAGCGGA GATTAAAGCACGCGCTGAAGAGCGGCTTTTAAAGGCTATTTTGGGATAAAGCGCGCATGTGGTCAATAAGAGTT TGATTGCCCTCCAGTTTGGAGGCGACGGTGATTGATGTAAAGTCTTCACTAAAGAGGCTATGAGAAAGACGCG CGAGTTTGGCGCGTATGAAGAGAAAGCAAGCTTATGAGCATTTTATGAGCGCTTACCATGCTCAATAG AGAAAGATTGTGCGCGTTAGCTCGCTCTTCTCAAGCGATTTTAGAGAGCGCTTTCAGCCATAACGGCAAGGATT ATAAAGAGGCGATCAATCCCT	2530	SMLVGAASLIPFLEHDDANRALMGTN MQRQAVPLLRSDAPIVGTGIEKIDRS WGAIKANRAGVWEKIDSKNIYILGESKE EAYIDAYSQKLNRTNQNTSFNQVPIV KVGDKVAGAGQIADGSPMDRGELALG KNRVAFMPWNGYNFEDAIIVSECITK DDIFTSTHIEKEVDARELKHGVEEFTA DIPDVKEEALAHDESGIVKVGTYVSA GMLVGTSPKGEIKSTPE:ERLLRAIFG DKAGHVVNKSLYCPPSLE:GTVIDVKVF TKKGYEKDARVLSAYEEEE:KAKLDMEH FDRLTMLNREELLRVSSLLSQAILEEPF SHNGKDYKEGDQIPKEEIASINRFTLAS LVKKYSKEVQNHYEITKNVFLEQKKVL GEEHEEKL SILEKDDILPNGVIKKVLYI AT
HP0806	2531	GATTAAACGCCACCCAGCCCTAGAACTCGCCTTCTTAATCGCTGACATGCTCAAAAAACAGCACGCTTAGTTAAAAA GAGATTAAATCTTTTAACTCTTTTACITTTATAATTATCGTTGGC	2532	LNATQALELAFLIADMLKK:QHA
HP0928	2533	GAGTGGCTTAAAAAGCGCGTATTTTCAAGGCGTTTGGCATGAAATGATAGTGGCTCAAAAACATTGAATTTTACTCCA CTTGCGAGCACCATTTGCTCCCTTTTGGGAATATTAGCGTGGGATATATCCCTAAGGAAAAAGATTGTAGGCATTA GCGCGATCGCTAACTCATTTGAAATTTATAGCAGACGCTACAAATCCAAAGAAAGGCTGACCATTCAAATTCAGAA ACCTTTGATGAAATCATAGAGCCCAAGGCGGTGATCGTGGTTGTGAAGCCCAAGCATTTGTGCATGAGCATGCAAG GGGTGCAAAAGCAAAATGCGATCATTAACCAAGCGTTCTAAGAGCGCTCTTTAAAAAGAGACTCTAAACACAGAGCT GAATTTATGCAACTCTTAAATCTTAGGTTATAATTCTAAGCATGAGTAGCCCTAATTTATCCTTTTATTATAATGAGTG CGAGCGTTTGAAGCTTTTAAAAAACCATCATTTACACCTTGAAAGCTTCCACCCCTTATTGGAAAAAGCCTTTT GAAATGGTGTCTTAATGGAGGCAAAAGGT	2534	VALKSAYFQGVCDDEMIVAQNIEFYSTC EHLPLFLGNISVGYIPKEKIVGISAIAKL IEIYSRRRLQIQLERTIQIAETFEIEIPRG VIVVCEAKHLCMSMQGVQKQNAIKTS VLRGLFKKDSKTRAEFMCILLKS

HP0928	2535	GCAAAAAGACGCTTGGGGTTCATCTATGAGATCAGCGAGTTCATGAAAGCCCTATACCGCATTCGCTAAAAAACAA GACCGATACGCTCTATTTATGAGGTATCTCCCTCTAGGTATGGCCAGCATTTAACGACTGCCCTTATGTCAAA TACCCTGATTTTGACGCTTTGAAAAAGCTTTGGTCTTATTATACCAACTTGGATTGCGAGGACGATCAGC CGCATCAAGCAAAACGATATCAACATTATCAAAACGTTAAAGCAATAGAGCGTTGAAACCATCAAGAGCTTATA TTGAATAGCATCGACTCTTAAACACCTTTGATCAATACCTCTATACTTATGGATAGCTCTCTGTTTATCATAGCA AATGGGTGCGTCTGTAGCCCTAGCTAATTTATGCGAGATGAAGAGAAACCCCATTTTATCGCTATGGATG CCGAAACCCAGTGGAGCATATTTGCCACAAACGCCCAAGAGAGGCGAGTCAATGGAACGCGGATTTGACAAAGA AAAAGAGAGAAATGGTAAATATATCGGAAATTAACCCCTTTAAAGCGTAAAGAACGCGCATGCTTTAAACGG GGATTTTGATGAAAAAGAAAAATTTATGGAGGCAAGACGAGCAAGTATTAGCTGTTATGACATCACTAAAGA ATTGTATAGCAATTATAGGAAGTGAATGAGAACTCCCTCCAGAGCGATACAAATCTTTGTATAACACTATCACGCC TGTTTACACATAGAGGGGCAAGAGATGATTTGAAGATGATTTGATCTAGAAATGATTAAGATTGCCAAGCATCA AAACAAAGAGAGGTGATCAATGCTTAAAGAGCTATTAAGATGTCAAAGAAAAAGGATTTTAAAGACTTCTTAA AGAGCCAAACAGCACCGCCCTATTGTTTCTATACAGATAATGATTGTGATGGCATGTTAGCTGGCAGCGCTTTAAT GCTATATGTT	2536	KKDACGFIYEISFEMKAYTALLKKQDRY VYLLRPLPSRYWASILTALYVKYPDFD ALKLLVSYYYQTWAGGTTRIKQTSIN IKNVKSNSVETIKELINSIDSYNTFDQ YLYNLWDSSSVYHSKMVRPVLALANY FMADEEKPHFIAMDAETQVEHILPQTP KRGSQWNADFDEKEKEEWVNNIANLT LLKRKKNAHALNGDFDEKRIYGGKDT SKVISCYDITKELYSNYRKNWNEKSLOE RYKSLYNTITPVLHIEGQEDDFEDFDL E
HP1204	2537	GGATTTATGAGATTGAAGTCAAGCTTGATCGGGGGTGTGGCGGTGTTAAATGATGTGGTGGCTGAGTAGAA ATGTTTGAAGCGACGACGATTTAGGCTATAGAGGGGAATTGAATCATATAAAGTTTCGGCTCATTTGGAGGCGATGG GCAG	2538	IYEIEVKLGSWVGWFKIDVVAE
HP1324	2539	TGACGCTATGAAAAAGTGGTAAAGACGGCGTGTATCACCGTTGAAGAAGCTAAGGCGATTGAAGTGAAGTGAAT GTTGTAGAAAGCATGCAATTTGATAGAGGTACCTCTCCCTTATTTGTAAACAAACGCTGAGAAATGACCGCTCAA TTGGATAACGCTTACATCTTTAACGGATAAAAAATCTCTAGCATGAAGACATCTCCCGTACTAGAAAAAACCC ATGAAAGAGGGCAACCGCTTTTATCATCGCTGAAGACATTTAGGGCGAAGCTTAAACGACTCTAGTGGTGAATAA ATTAAGAGGGGTGTTGAATATCGAGCGGTAAAGCTCCAGGCTTTGGGACAGAAAGAAATGCTCAAGACAA TCGCTATTTAACCGCGGTCAAGTTATAGCGAAGATTTGGCTTAGTCTAGAAACGCTGAAGTGGAGTTTAA GGCAAAGCGGAAAGGATTGTGATTGACAAAGACAAACACGATGATGCAAGAGCCATAGCCATGATGTCA AAGACAGAGTCGCGCAATCAAAACCCAAATGCAAGACGACGAGGATTAAGCAAGAAATGCAAGAAAGG TTGGCTAACTCTCTGGCGGTGCTGTGATTAAAGTGGCGCTGCGAGTGAAGTGAATGAAGAGAAAAAG ACCGGTTGATGATGCGTGAAGCGGCTAAAGCGGCTGTTGAAGAGGATTTGATTGGCGGCTGCGGCTC TCATTGCGCGGCTCAAAAGTGCATTTGAATTTGCACGATGATGAAGAGTGGCTATGAATCATCATGCGGCTC ATTAAAGCCCATTAGCTCAATCGCTATCAATGCCGTTATGATGGCGGTGCTGATGAAGTAGAAAAACA CGAAGGGCATTTTGGTTTAAACGCTAGCAATGCAAGTATGTGGATATGTTTAAAGAGGCAATTATTGACCCCTTAA AGTAGAAGGATCGCTTACAAAT	2540	DAMEKVGKDGVTVEEAKGIELDW EGMQFDRGYLSPYFVTNAEKMTAQLD NAYILLTDKISSMKDILPILLEKTMKEGK PLLIAEDIEGEALTTLVWNKLRGVNLAA VKAPGFGDRRKEMLKDIALITGGQVISE ELGLSLENAEVEFLGKAGRIVIDKONTT IVDGKSHSDVKDRVAQIKTQIASTTS DYDKEKLQERLAKLGGVAVIKVGAAS EVENKEKKDRVDDALSATKAAVEEGIV IGGGAALIRAAQKVHLNLHDDEKVGYEI IMRAIKAPLAQIAINAGYDGGWVNEVE KHEGHFGFNASNGKYVDMFKEGIIDPL KVERIALQNAVSVSSLLLTTEATVHEIK EEKAAPAMPDMGGMGGMGGMGGMGMM TATTTQDGVTTTTTNNNNKATVKFDITN NAEQLNQAANIMQVNLNTQCPLVRSTN NENTPGGGQPWGLSTSGNACSFQOE FSQVTSMIKNAQEI
HP0115	2541	AACCGGACACCAACGCAAGACGGGTAAACGATCACCACTACCTATAATAACAAAGCCACCGTCAAAATTTGACA TCACCAATAACGCTGAACAGCTGTTAAATCAAGCGGCAACATCATGCAAGTCTTAAATACGCAATGCCCTTTAGTGC GTTCCACGAATAACGAAACACTCCAGGGGTGTTCAACCATGGGTTAAGCACATCCGGGAATGCGTGCAGCAT CTCCCAACAAAGAAATTTAGCCAGGTTACTAGCATGATCAAAACGCCCAAGAAATAATCGC TTGAAATGCTTTATGAAGGGATTTTGAATTTCTCGCAAGCCCAACGCTGATTGAAATGAAGACATTGAAAAAA GATTTATTAATAGGGTACGGATTTTACGGAAATTTTACGGAAATTTGATATTATGAATGAAGAGGGGGAAGTG GCGGTGATCTTACGGGCTTACACCCATCAATCAAGTTTAAACGAGGCCAATGTGGAATGATGCGAGTAA GATTGATTTGGTGTGAATGTGGCTAGAGGTTATTAGAGCATGGAGGAAATCCATTGAGATGAAGTCCGCTAAC ATTTTATTAGATTCCTTAAATCGCTCTGTTTAAAGATTCTAAGCAAGCTTTTATTGATAGAGCGCTTTCTTT AGAGCAATAAAAGTTTGGATTAGATGCGCTTTTAAAGCTTAAAGCAATGATAGCCCAAGCATTTGAATTATAGA AAAGAAAAAGAAAGAACTGCAATTACAAATGCATAAGGCTAAGAAAGATTCAAAAT	2542	EEKAAPAMPDMGGMGGMGGMGGMGMM TATTTQDGVTTTTTNNNNKATVKFDITN NAEQLNQAANIMQVNLNTQCPLVRSTN NENTPGGGQPWGLSTSGNACSFQOE FSQVTSMIKNAQEI
HP0115	2543	TTGAAATGCTTTATGAAGGGATTTTGAATTTCTCGCAAGCCCAACGCTGATTGAAATGAAGACATTGAAAAAA GATTTATTAATAGGGTACGGATTTTACGGAAATTTTACGGAAATTTGATATTATGAATGAAGAGGGGGAAGTG GCGGTGATCTTACGGGCTTACACCCATCAATCAAGTTTAAACGAGGCCAATGTGGAATGATGCGAGTAA GATTGATTTGGTGTGAATGTGGCTAGAGGTTATTAGAGCATGGAGGAAATCCATTGAGATGAAGTCCGCTAAC ATTTTATTAGATTCCTTAAATCGCTCTGTTTAAAGATTCTAAGCAAGCTTTTATTGATAGAGCGCTTTCTTT AGAGCAATAAAAGTTTGGATTAGATGCGCTTTTAAAGCTTAAAGCAATGATAGCCCAAGCATTTGAATTATAGA AAAGAAAAAGAAAGAACTGCAATTACAAATGCATAAGGCTAAGAAAGATTCAAAAT	2544	EMLYEGILRFSSQAQRCIENEDIEKKY YINRVDTIFTTELLNLDYEKGGEVAVYLT GLYTHQIKVLTQANVENDASKIDLVLNV ARGLLEAWREIHSDELA

HP0115	2545	CTCCAACTAAAGCGATGGTGGTGAATAATGAAGAAGCTAAACGGCCAAATTAGCCAAAGCAGCGG GACAAACACAAATCTCTAACAGCAGCGTGATGGAGCTTTAAACACCGTGTTGCAAAATGTCAGCAATTTCCAAC AAAGCATTCAAAACGCTTTTCAAAACCAAGAAAGTAATATCAAGCTTGGCGAATGCGAATTTATAACACTAATGGGA GTCAGTCGCAAGAGATGACACCTAACAAATACCAAGATTTACGATCAATGAGGGCGAATTTTACCAGCTCATCA ATACCATTAACCAAGCAAGTGCCTACAGACATGAATGCTTTAATTAATCAAGCCAAACCAACCAACCAAGCG TTTAGGGGTGATGGGTGAGTGAGGTGCAAGCGTGGGGCTTTGTAAAGATTATGAAGTAACGCTTCAAAAC GATTCCTGATCCGCTAATACTGAGTTAGAGCAAGTCGTAACCGGATTAAATTCCTAATACGATACCGGTGGG GGCGTTATTTAGAAACGGGTTGAAATAATTATAAGATCGCATGCTATATCCATCTTTGAAGGATTTAGAAGAA ATTGTGTTAAAGAAAGGGCTATCCCTTTAAATAACAAGATATAGCCAGCGTTAGGCTAACGCCCAACCCACG CCGAGGGCGGCCAACCTTAATGCGGATAAGGAAGTGGTGGCGGATTGTTATGGTGGCTATCACGCTGACAC TTATAAGGTGCTTAAGCCATTAAAGCAATTAAGAAATCGCCACCTTACA	2546	PKLKAMVVVNNEEAKTANLAQSSGT TTQSPNSTVMGALNTVI.QNVSNFQQSI QNAFQNEQNIQAWANAIYNTNGSQS QEMTPNNNQDLRIQLRANFYQLINTIN QQVPTDMNALINQSQQTQQT LGVDGVSEVASVGGFVKDYEVTLQND SLIRYNLSLEQVANAIAKNSNDTGGGVI LENGFEKIIRSHGYIQSLKDLEEIVWKE GAIPLKIKDIASVRLTPK'RRGAANLNG DKEVWGGIVMVRVYHAD'YKVLKAIKEI ATL
HP1334	2547	TTTAGGGGTGATGGGTGAGTGAGGTGCAAGCGTGGGGCTTTGTAAAGATTATGAAGTAACGCTTCAAAAC GATTCCTGATCCGCTAATACTGAGTTAGAGCAAGTCGTAACCGGATTAAATTCCTAATACGATACCGGTGGG GGCGTTATTTAGAAACGGGTTGAAATAATTATAAGATCGCATGCTATATCCATCTTTGAAGGATTTAGAAGAA ATTGTGTTAAAGAAAGGGCTATCCCTTTAAATAACAAGATATAGCCAGCGTTAGGCTAACGCCCAACCCACG CCGAGGGCGGCCAACCTTAATGCGGATAAGGAAGTGGTGGCGGATTGTTATGGTGGCTATCACGCTGACAC TTATAAGGTGCTTAAGCCATTAAAGCAATTAAGAAATCGCCACCTTACA	2548	LGVDGVSEVASVGGFVKDYEVTLQND SLIRYNLSLEQVANAIAKNSNDTGGGVI LENGFEKIIRSHGYIQSLKDLEEIVWKE GAIPLKIKDIASVRLTPK'RRGAANLNG DKEVWGGIVMVRVYHAD'YKVLKAIKEI ATL
HP1334	2549	GCAAAAGACGCTTGGGGTTCATCTATGAGATCAGCGAGTTCATGAAAGCCTATACCGCATTCGCTAAACAAACAA GACCGATACGCTATTTAGGTATCTCCCTCTAGGTATGGCCAGCATTTAACGACTGCCCTTTATGTCAA TACCTGATTTGACGCTTGAAGAGCTTTTGGTCTTATTATACCAACTGGATTGCAGGAGGCACGATCAGG CGCATCAAGCAACCAAGTATCAACATTATCAAAACGTTAAAGCAATGAAGCGTTGAAACCATCAAGAGCTTATA TTGAATAGCATCGACTCTTATAACACCTTTGATCAATACCTCTATACTTATGGATAGCTTCTCTTATCATAGCA AATGGTGGCTCTGCTTAGCCCTAGCTAATTTATTCATGGCAGATGAAGAAACCCCATTTATCGCTATGGATG CCGAAACCCAGTGGAGCATATTTGCCACAAAGCCCAAGAGGCAAGTCAATGAACGCGGATTTTGACAAAGA AAAAGAGAGAAATGGTAAATAATATCGGAAATTAACCTTTAAAGCGTAAAGAACGCGCATGCTTTAAACGG GGATTTGATGAAAGAAATTTATGGAGGCAAGACACGAGCAAGTGAATGATGCTGTTATGACATCACTAAAGA ATTGATAGCAATTATAGGAAGTGAATGAGAGTCCCTCCAAAG	2550	KKDACGFIYEISEFMKA'TALLKKQDRY VYLLRYLPSRYWASILT'TALYVKYPDFD ALKKLLVSYYYQTWAG'GTITRIKQTSIN IINKVSNKSVETIKELILNSIDSYNTFDQ YLYNLWDSSVYHSKWVRPVLALANY FMADEEKPHFIAMDAETQVEHILPQTP KRGQWNADFDEKREEWVNNIANLT LLKRKNAHALNGDFDEKRIYGGKDT SKVISCYDITKELYSNYRKWNEKSLQ
HP0002	2551	ATTACAAGGGAATGAAAGAGTGGCTATTTTAACATCGCGCTTCAATCATATCATACAGACAGATTGCAAGAAGGGG CGATGAGCTGCTTTAAAGGCGATGGGGCGATGAGGATCTTTTAGACATCGTGTGCTGGCTGGGCTTATGAAAT GCCCTTTATTTAGACAAATATTAGAGAGCGAAATACGATGGCTGCGTTTGGAGCGGATCATTAGAGGGG GGACTCCGCTTTGATGATGAGCGCGGAAAGCGACTAAGGATTTGCCATGCGATGCTTAATACAGCATGCC GGTAAGCTTTGGCGTGTGACCCAGGACATATTGAACAGCGGATTAAGAGAGCGGCGAGTAAAGCCGCAATAAG GGCTTTGAAGCGATGAGCACCTTATTGAATTTGAGCTTGTGAGCTTGTCCAACTCTCAAGGGTTAAATGGCGACACGAA CTCAAGCCAGGGGCTGTGTTGAATTTGATGCGTTGAGAGCGGTAATGAAGAAATTAAGAAATCGCTTCT AGCATGTTAGAGAAAGAAAGATTAAACACACCACTGCTTTCGCTTTAAGCCTTTTAAATGGCTGTAGAAAAA TCAATGAAATTGACGCCCTCATCGAGCGCATTTAAAGACTGGGATTTCAAGCGATTAGGAGCATGGAAAAAGCGG ATTTACGCTTAGGAGCGTATGAAATTTGCTTACGCCACGCAAAACCTAT	2552	LQGNERNVAILTSRFNHIITDRLQEGAMD CFKRHHGGDELLDIVLVPAYELPFLD KLESEKYDGVCLVLAIRGGTTPHFDY VSAEATKGIAHMLKYSPMPVSFGLTT DNIEQAIERAGSKAGNKGFEAMSTLIEL LSLCQTLKG
HP0002	2553	TAACTTAAAGTCGCAATTTGCAGATGCCAAAGCCCTTTTAAATTTGCGATTAAAGGCTTAGCGTGAGAAAAATTGGA AGCTTTAAGGAATAAGGCTCGCAATCAAGGCAATTAAGTGCAAGTGAATTAAGAACACTCTTGCTCATATTGCCATGAA AGAGACGGCTATTCTGATTTGATTTGAAAGAAACCAATGTTTTTGTGGGCGGTGATCAATCGCTCTCTCTAA ACTCGTGTGATTCCAAAGAGCATAAAGATCATTGTTGTTGAAAGCGGGC	2554	NLKSQFADAKALLICDYKGLSVRKLEAL RNKARNQGIKQVQIKNTLAHIAMKETG YSDLDLKETNVFLWGGDQIALSKLVFD FQKEHKDHFVLKAG
HP0002	2555	AGGTGTTCAAAGACAGCAAAAGACGCTTGGGGTTCATCTATGAGATCAGCGAGTTCATGAAAGCCTATACCGCA TTGCTAAAGAAACAGACCGATACGCTATTATTAGGATCTCCCTCTAGGTATGGCCAGCATTTTAACGACT GCCCTTTATGTCAAATACCTGATTTGACGCTTTGAAAGAGCTTTGGTGTCTTATTATCAAACTTGGATTGCAG GAGGCACGATCACGCGCATCAAGCAACAGTATCAACATTATCAAAACGTTAAAGCAATGAAGCGGTTGAAACC ATCAAAGAGCTTATATTGAATAGCATCGACTCTTATAACACCTTTGATCAATACCTCTATACTTATGGGATAGCTCTT CTGTTTATCATAGCAATGGGTGCGTCTGCTTAGCCCTAGCTAATTTTATGCGAGATGAAGAGAAACCCCAT TTATCGCTATGGATCGGAAACCCCAAGTGGAGCATATTTGCCACAAACGCCCAAGAGGAGTCAATGGAAACGC GGATTTTGACAAAGAAAGAGAGAAATGGTAAATAATATCGGAAATTTAACCCTTTTAAAGCGTAAAGAAACGC GCATGCTTTAAACGGGATTTTATGATGAAAGAAAGAAATTTATGAGGCAAGACACGAGCAAGTGAATGATGCTGTTA TGACATCAAGAAATTTGATAGCAATTATAGGAA	2556	VFKDSKDACGFIYEISEFMKAYTALK KQDRYVYLLRYLPSRYW/ASILT'TALYV KYPDFDALKLLVSYYYQTWAGGTTR IKQTSINIKNVKNKSVETIKELILNSIDS YNTFDQYLYNLWDSSVYHSKWVRPV LALANYFMADEEKPHFIAMDAETQVEH ILPQTPKRGSQWNADFDEKREEWV NIANLTLLKRKNAHALNGDFDEKRIY GGKDTSKVISCYDITKELYSNYR

HP0002	2557	TGCAAAATTTTATTGAATCAAAAGCCAAACCTTAGAAGAAGCCCTCATTCAAGCTTCTATCGCCTTGAATTGCCCA TTATTAAATTTGCAATACGAAGTCAATCAAGCCCTCTAAAGGTTTTTAAGCATTGTAAGAAAGAACCCATTATCTT AGCGGCGTTAAAGAAAGCGTTAAAGAGATTAAAGAGAGCGTTAAAGAAACCAACACGAAAGAAATCCATCAAA GCGCAGAAAGAAACAAATTAAGAAACAGAAACACCGCAAGAAATCATTACCCCTAAACCCCTCTAAACAAA ACCCTAAAGAGATCTCATAGTGGGACAACTCCATGAGATTAAACAGAAATGAAAGACTTATTCTCTCATTTGC CCTATAAATCAACAAAGTGGAGGTGAGTCTTTATGAGCGGGGTTATTGATTGATTTGATGGCGAAGATTCC GCTCTTTAATTGGCGAGAAAGGCTATCGTTACAAAGCCCTTCTTACTTCTTTAACTGGATCCACCTACTTATG GCTATAGTATCCGCTTAGAATCTCCACTTTTACAAACCAAGAAAGGTTATGGATACCCAAAC	2558	QNFIEIAKATLEEAALQASIALNCPINLQ YEVIQTPSKGFLSIGKKEAILAGVKESV KEIKESVKETNTKEIHQSAEEKKQKLE TETPQEEIITPKPSKKNPKKEESHSGDKL HEIKQELKDLFSLPYKINKVEVSLYEP GVLLIDIDGEDSALLIGEKGYRYKALSY LLFNWIHPTTYGYSIRLEISTFLQNQEKV MDTQ
HP0124	2559	GGCTTACTATGTCAATATCAGCTACTCCAAAGAGCATGATTTAAAGTCGGCGATAAAATATGAAAAAGAAATCA AAATGTCCACAGAAAGATTAGCGCAATTTATGCGTCCCAATCCACCCCTACGATTGTTTTATCCGATAAAACCGGCA AAACCATCTATGAATGCGCGCTATATGCCCTCTACGCAATTTTAGCCGTGTTAGAAATTTATCGCGGATGGGAAGT ATCAAGACACAAAGACGATGAGGATCTCACTAAATAAAGGCTTACATCAAGTATAAAACCAACCTTTCTTAA GCAAGTCTAACTAGGAAAGCCTAATGAAGATCTCAAAAGCCTGCTTTCTTTTGTGG	2560	AYYVNISYSKEHDFKVGDKNNEKEIKM STEELAQIYAVQSTPTTVLSDKTGKTIYE LPGYMPSTQFLAVLEFIGDGKYQDTKD DEDLTKLKAYIKYKTNLSKSKSN
HP0124	2561	GCAAAAAGACGCTTGGGGTTCACTATGAGATCAGCGAGTTCATGAAGCCCTATACCGCATTCGTAACAAAAACAA GACCGATACGCTATTAT	2562	KKDACCIFYEISEFMKAYTALLKKQDRY VYL
HP0242	2563	ACCCCTTAGACAAGTGGAAATGATATTATTTTCATGCGAGTAAAGCTTTCTAAAGAGAGCTAGAAAGGCTTTTAG AGCTTTTAGCTCTCTTGAAACTTTTATAGAAAAGAAAGACTTAGAAGAAAGTTTGAATCTTTCGCTAAAGCTTTAAG GATTGATGAAGAGTTGCAACAAAAATAGAGAGCAGGAAACAGACAT	2564	PLDKWNDIIFHASKLKKLELERLLELL ALLETIEKEDLEEKFEFSAKALRIDEEL QQKIESRKTD
HP0001	2565	GAACCTCCTTATAACATTTCCGTTAAACAAATTTCCACCCCTAAAGAGCGCTAAAGGCAAGGCATAGATTTTGG GGAATGGGATAAAATTTCAAGCTTTTAGAATGGATCGCAGCTAGCCCTTAGTCAATCCAAACGCGCTGCATGG TTATTTTGTCTTACAGGTTTATAAGCTATATCGCTGATTTTGAAGAAACGCGCTTTGTGTCAAGACCTTTATC CAATGGGTTAAATAATCCCATGCCAAGAAACATTACCGCGGTTATG	2566	DPYNNISVKNNEFTLKSARKQGIDFGE WDKNFKLLEWIARYAPLVNPNMGCMVIF CSYRFISYIADFEENGFFVVKDFIQWVK NNPMRPNHRRY
HP0001	2567	CCACCAAAAGTTTAGAATGCGCGAGATTGGCATTGTAGGGCTAAAGCGTTACGGATATTGCGGTGGGT GATACGCTACAGACGCTAAACCCCTACCTCTAACCCATTGAAGGCTTTATGCCGCTAAACCTTTGTTTGGC GGCTTTACCTATAGAAACGACAGGTTTGAAGATTAAAGAGAGCGTTATTGAAGCTCCAGCTTAACGATTGCGC TTTAAATTTGAGCCTGAAAGCTCTGTGGCGCTTGGCTTTAGGCTTGGCTTTTAGGGTTATTGCACATGGA AGTGATTAAAGAAAGACTGGAAGGGAATTTGCCCTAACCTCATCGCTCCACGCTGGTG	2568	TKSLECGEIGIVSLGLKSVTDIAVGDTLT DAKNPTSKPIEGFMPAKPFVFAGLYPIE TDRFEDLREALKLQNDALNFEPES SVALGFGFRVGLGLLHMEVIKERLER EFGNLIAATPTV
HP0001	2569	TAAATCCGGGAGTCAATTTGATTGGCTATCGCTCTTTAATCGCTTGCAAAACAGAGTTGGCTTTTAAAGAGTG GTTTGGCTTTGGGAGTTAGGGCTTGATGGCAAGATCAACCCCAATCCTAACATTTTCCCATGCTTTTAGACATTGC CATTAAACACCCCATGCTAAGATCATTCGCGCTAAGGCCAATGAAGAGCTTTTTCGCTTATCCCTAATTGCAATG CTTTTGTGGGCGCATTTTAAAGAGCGTTAGAAATCT	2570	KSGSHFDLPIALLIALQKQELAFKEWFA FGELGLDGKIKPNPNIFPMLLDIAIKHPH AKIAPKANEELFSLIPNLQCFVGVGHFKE ALEI

HP0243	2571	AGGTGTTCAAAGACAGCAAAAAGACGGCTTGGGGTTCATCTATGAGATCAGCGAGTTCATGAAAGCCATATACCGCATGCTAAACAAACAGACCGATACGCTCTATTATTAGGATCTCCCTCTAGGTATGGCCAGCATTTTAACGACTGCCCTTTATGTCAATACCCGTGATTTGACGGCTTGAAAAAGCTTTGGTGCTTATTATTACCAACTGGATTGCAGGAGCACGATCAGCGCATCAAGCAACCCAGTATCAACATTATCAAAACGTTAAAGCAATAAGAGCGTTGAAACCATCAAAGAGCTTATTGAATAGCATCGACTCTTATAACACCTTTGATCAATACCTCTATAACTTATGGGATAGCTCTTCTGTTATCATAGCAATGGTGCTGCTCTAGCCCTAGCTAAATTTTATGCGAGATGAAGAAACCCAAAGTGGAGCATATTTGCCACAAAGCCCAAGAGCGAGTCAATGGAACCGCGATTTTGACAAAGAAAAAGAGAAAGTGGTAATAATATCGGAATTTAACCCCTTTAAAGCGTAAAAAGAACCGCGCATGCTTTAAACGGGGATTTTGATGAAAAAGAAAAATTTATGGAGGCAAGACACGAGCAATTTATGACATCACTAAAGAAATTGTATAGCAATTATAGGAAGTGAATGAGAGTCCCTCCAAAGAGCGATACAAATCTTTGTA TAACACTATCAGCCCTGTTTACACATAGAGGGGCAAGAGATGATTTTGAAGATGATTTGATCTAGATGATTAAAGATTGCCAAGCATCAAAACAAAGAGGTGATCAATGCCTAAAGAGCTATTAAAGATGTCAAAGAAAGGATTTTAAAGACTTCTTAAAGAAAGCAACAGCACCGCCCTATTGTTTCTATACAGATAATGATTGTGATGGCATGTTAGCTGGCAGCGTTT	2572	VFKSKKDACGFIYEISEFMKAYTALL KQDRYVYLLRYPSPRYWASILTALY KYPDFDALKLLVSY'Q'WAGGTIT IKQTSINIKNVKSNIKSVETIKELILNSID YNTFDQYLYNLWDSSSYHSHKWWRP LALANYFMADEEKPHFIAMDAETQVE ILPQTPKRGSQWNADFDEKREEWV NIANLTLLKRKKNAHALNGDFDEKRIY GGKDTSKVISCYDITKELYSNYRKWNE KSLQERYKSLYNTTTPVLHIEGQEDDFE DDFDLE
HP1338	2573	GAAAGTGATTGAGCGGTGGCTAACGCTACTTTAAGGTGGAGTTAGACAATAAGCATGTGGTGTGGCCGTATTTCTGGAAGATGCGCATGCACTATATTAGGATTGCTTTAGCGGATAGGTTAAGCTAGAGCTTACGCCCTATAGCTTAGACAAAGGTGCGATAACTTTTAGATATAATGAATTTAAGGGTATTTCATGAAATATGTTAATATAAAGTTTTTAGTAGTGCCTAATTTTCAAAGGAGAAATCATGAAAGTCAGGCCATCAGTGAAAGAGATGTGCGATAACTGCAAAATCATTAAAGAAAGGGCGTTATTAGAGTGATCTGCGCTACCCCTAACACAAACAAAGACAAAGGATAAGCATGGCAA GGATTGCTGGTGATGTTTACCACAAAGAGAGAGTGGAGTATGCCCTTACCTATATTTATGGATTGGGCTTAAGAGTCCAGAGAGATTTAGAGCGGTAGGCTTTCTTTGACAGCGCGTGCATGAATGAGCGAAGATGAAGTGCTAGCATCGCTAAACAAATCCACAAAGCTACCTAGTAGAGGGCGATTTCGTAAAAAGTTCAATGGATATAATCTTTAATGGACTCGTAAGGGTAAGAAAAAACCGTGGTAGCAAGTAGCGAATAAGGAGATGATGATTTAATGGCTAA GAGAAATGTAACGGCTAAAGAAAGTAGTCAAAAGAAATATTGCGAGAGGGTGTATTATTTTACGGACCTTTTCCGCTTTTCGGTTCTTTACACAAATTTATTAGACGAATTAGACACCGCATCATTTAAAAACGGCTATTTCTCTCG ATCAGAAATTAGTGGCGGACATGATCAGAAAAATTAGTAGAAGACAATGGGAGAGCAACCCCTAATGACGAGAGCAAAATCGCGTGTGTGATTTATGATCACCACCAAGGAAATTAACCCAGCGCATGATAGACATTGAGCATGCCAGCGGACGATGTTTATGCACCACGCACATTCACATGGATGAGCAATAATGCTTGGAGACGATTATTTTACA AGGCAATTCGTTGAAATCCACCGCTTGCAATTGGAATGGGGGCTTAGGGGGTTAAATTCGCTAAATGACTAAGCGTCTAGCTTTGAATACAAATAGCGTCTTAAATACAAAGAAATTAGCGCTCTATGGAGGGAGTTTGTATCCCTTGCACAAAGGCTCATTTAGCCATTATTAGCAAACTTTAGAAATTATTGCCATCCGCTAAGCTCATTTGTCTTACCCGCTTATCAAAACCCCTTTTCAAAAGCCCATGTTTGTGGACGCAC	2574	KVIEALPNATFKVELDNIKHVLCRISGK MRMHYIRIALGDRVKLELTPYSLDKGRI TFRYK
HP1338	2575	GCGCTTTTCGGTTCTTTACACAAATTTATTAGACGAATTAGACACCGCATCATTTAAAAACGGCTATTTCTCTCG ATCAGAAATTAGTGGCGGACATGATCAGAAAAATTAGTAGAAGACAATGGGAGAGCAACCCCTAATGACGAGAGCAAAATCGCGTGTGTGATTTATGATCACCACCAAGGAAATTAACCCAGCGCATGATAGACATTGAGCATGCCAGCGGACGATGTTTATGCACCACGCACATTCACATGGATGAGCAATAATGCTTGGAGACGATTATTTTACA AGGCAATTCGTTGAAATCCACCGCTTGCAATTGGAATGGGGGCTTAGGGGGTTAAATTCGCTAAATGACTAAGCGTCTAGCTTTGAATACAAATAGCGTCTTAAATACAAAGAAATTAGCGCTCTATGGAGGGAGTTTGTATCCCTTGCACAAAGGCTCATTTAGCCATTATTAGCAAACTTTAGAAATTATTGCCATCCGCTAAGCTCATTTGTCTTACCCGCTTATCAAAACCCCTTTTCAAAAGCCCATGTTTGTGGACGCAC	2576	RFSVSLQQLLDELNRIIKNGYSSRS ELVRDMIREKLVEDNWAEDNPNDISKI AVLVWYDHHQRELNQRMIDIQHASGT HVLCTTHIHMDEHNCLEIILQGNSEI QRLQLEIGGLRGVFKAKLTAKASSFEYN E
HP1338	2577	CCGATAAGGGATTAAAAAGGTGTTCAAAGACAGCAAAAAGACGCTTGGGGTTCATCTATGAGATCAGCGAGTTCATGAAAGCCCTATACCGCATGCTAAANAACAGACCGATACGCTCTATTATTGAGGTATCTCCCTCTAGGTATTGGGCCAGCATTTAACGACTGCCCTTTATGTCAAATACCCGTGATTTGACGCTTTGAAAAAGCTTTGGTGCTTATTATTACCAAACCTGGATTGCAGGACGATCAGCGCATCAAGCAACCCAGTATCAACATTATCAAAACGTTAAAGCAATAAGAGCGTTGAAACCATCAAGAGCTTATATTGAATAGCATCGACTCTTATAACACCTTTGATCAATACCTCTATA ACTTATGGGATAGCTCTTCTGTTTATCATAGCAAAATGGGTGCGTCTGCTTAGCCCTAGCTAATTTATTCATGGCAGATGAAGAGAAACCCCATTTTATCGCTATGGATGCCGAAACCCCAAGTGGAGCATATTTGCCACAAACGCCCAAAAGA GGCAGTCAATGGAAACCGGATTTTGACAAAGAAAAAGAGAAATGGGTAA'AAATATCGCGAATTTAACCCCTTTTA AAGCGTAAAAAGAACGGCATGCTTTAAACGGGGATTTTGATGAAAAAGAAAAATTTATGGAGGCAAGACACG	2578	DKGLKVKFKDSKKDACGFIYEISEFMK AYTALLKKQDRYVYLLR'Y'LPSRYWASI LTTALYVKYPDFDALKLLVSY'Q'WTWI AGGTITRIKQTSINIKNVKSNIKSVETIKI LILNSIDSYNTFDQYLYNLWDSSSYH KWWRPVLAANYFMADEIEKPHFIAMD AETOVEHILPQTPKRGSQWNADFKE KREEWVNNIANLTLLKRY'K'NAHALNGI FDEKRIYGGKDT

HP1338	2579	CATTGAAATGCTTTTATATGAAAAATTTAGAGCGCAAAAAATGCAATTTGGCGCTAAATCGCATGCCCAATAAT AACGAGCGCTTGAAGCGTTTATCGCTTCTTACCCCTTAAACTCACACGCGATCAACAAACGCCATTAAAGAAATC CAAAACGATCTACATAGCTCCATAGCGTGAAGCGTTGATTATAGCGGATGTGGGTGCGGAAACGATGGTGA TTTAGCGAGCATGTTAATTAACCTACCAATAAAACCCCTTTAATGGCGCCACTTCCATTCTCGCTAACACAGCTTTA TAACGAAGCCTTAAATTTTACCCCTTATTTTGAAGTGAATTTGCTGCTCGCGGAGTTACAAGAGCGGATCCAA TCATTGTTTGAACAATCACGCGATGTGGTTATCGGCACGCAAGCGTTGTTGATAAGCGGATTTGAATGAATT CGCTCTAGTGAT	2580	IERLAFIYMKNLERKKLQFGAKIACPNK ERLKAFLASLPFKLTRDQQAIEIQNC LTSSIAKRLIGDVCGCKTMVILASW TYPNKTLLMPTSLAKQLYNEALKFLJ PYFEVELLLGGSYKKRSNHLFETITHV IGTQALLFDKRDINEFALV
HP0249	2581	GAGAGCGAGTCTCTTTTACGCCCTTTTACCCCAAAACAGAAAAACCCCAATCGCCCTCAAGGTTTGGCATGTTCTA GCGGCCAGTTTGGAAATTTTAGAAAAATTAGTATCGCTATCTTTAGAAAGACAGAAAGCTTGTGGATTAGCGG TGGCTATATCCATAGTGGGTATTCTTGCATAAAAAACAAGAAAT	2582	ERSVFQPFYRKTEKPNRPQFAHVSS APSLFLEKLVIRYLLEDRLSLDLAVGY HSGVFLHKKQE
HP0249	2583	GCGCGAATAAGAGTTTGAAGACAAACCTATCGCAGAAATTTATAAGAGCGTGCTAAAGCCACCAACGAAGTGATG GCTATTTTAGAAACGGCTCTAAAGCGACTTTAGAAATCTTAGATCCCTTAGCCATAAGGAAATTTTGTAGCCGTTG AAACCTTTAAATGCTAGGCAAAACAGAAAGTAAAGACAATCTTAATTGGATGATCGCTTAATCATTGAAAAAGACAA GGTCTATGAGCAAGTAGGCTCGGTGCGTTTGTGGTATCATAGCGAGCGCAATCATGGTGTAGCCTTGATTATAG CGATCACTCTCTTAATGCGAGCGATCGTGAGCAGTCTGTTGGAAGCGCTTCTAGCACCTTGCTCATTTCTTTAAAT TATTGAACAAATCAAGCCAAATCTAGCGGTATTAATGATTGAAGCGAAATCCAATGACGAGTTAGCGCGCATGCAAA CAGCGATCAATAAAATATCTTGCAAAACCCCAAAATCATGCAAGAAAGACAGGCAAGCGCTCAAGACACCATTA GTGGTTTCAGATGTGAAGCAGGGAATTTGCGGTGCGCATCAGGCTGAGCCGCAAGCGCTGATTGAAAGAAAT TGAGGACGCGCTAAATGGGATCATGGATTATTGCAAGAAAGCGTAGGACTCACATGCCAAGCATTTTCAAAATC TTTGAAGCTATTCTGGTTGGATTTAGAGCGCGGATCCAAACCGCTTCGGGTAGGGTGAAGCTGGTTACTAACGC TTTAGGCAAGAAATCCAAAAATGCTAGAAACCTCGTCTAATTTTGCCAAAGATTAGCGAAGCATAGCGCGAATTT AAAAGAGTGGTGAAGAAATTTAGAAAAAGCTTCAAACTCCCAACACAAAGCTTGATGGAACTTCCAAACGATAGA AAATATCACCACTTCCATTCAAGCGGTGAGCTCTCAAGTGAAGCCATGATTGAACAAGGCGCAAGACATTAAAGCA TTGTAGAAATCATTAG	2584	ANKSLQDKPIAEIYKSVPKATNEVMAIL ENGSKATLEYLDPFSSHKENFLAVETFK MLGKTESKDNLNMWIALIIEKDKVVEQ VGSVRFVVIASAIMVLALIAITLLMRAIV SSRLEAVSSTLSHFFKLLNNQANSSGJ KLIEAKSNDELGRMQTAINKNILQTQKI MQEDRQAVQDTIKVSDVKAGNFAVRI TAEPASPDLEKELRDALNGIMDYQESV GTHMPSIFKIFESYSGLDGRGRIQNAS GRVELVTNALGQEIQKMLETSSNFAKD LANDSANLKECVQNLEKASNSQHKSL METSKEIENITTSIQGVSSQSEAMIEQG QDIKSIVEIIRDIADQT
HP0249	2585	TTTTTCAAAACACTATGAGTTTGGATATAGCCAGCATGATTTTAAATCACCAGCTATCAAAATTTACTCAACACAG CACCGATTGAAGCATTATCGTTTCTCGTTTCTGTTTCTGCTATCTTTTCCCTTAATCCCTTTTAAATTTTGGCACCTTA TTGCAAAACCTAATGCTAACGCACTACTTTTATCTTTAAAGAGAAAGATGCTAGATTATTCAAGAGCTTAGCAC CCCCATGTTAGGATTTTCTTGTGTTTAAAGGTTAGCGGCTGCTCTTCTCCCTTTTGTGAAACCAT TTAGTGCCCTTTGCGGTGCGTGGGCTTTGAGTTGTATGTAGCGCGATTTTTACCCACITTAGAATTTTCAAAC GCCGCTTACACGCCAGAGGTTTATCATGCTTGTGCGAATTTTATAGGGGTGCGGCTGCTGCTTTTAA CAATCGTCTTTGCAAGCTTAGTGTGCAACCGATAGCATCAGCTTTTCTATGGGCTTACGATGGCGAGCGGTA TGATCCTATTTAGGATCGCAAAACCCATTGTGGGCAAGCCCTTTTATGTTAGCGATTTTAAATTTATTGGATTTA TCGTTCCACCATCAATCATTTTGTGTTGTGATCACAGCTTAAAGCGCTTCCCTTTAGGGCAAT	2586	FFKNTMSLDIASMIFNHQSYQNLLKQH RLKHRYRFSFFCYLFSLIPFFNFATLLQ TLMTHYFFIFKEKEC

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HP0249	2595	ATAAACTCATTTCTGGCTGGTCCGAGGATTTAGCGGTTTGTAGTAAATCGCTTTAAATAGCATCAACCCCTA GTAAAGAGCTGACTAGCACCATTTCTAGCATAGGTGAAAAGCGTTAAATGACTTATTAGCGGATGGCGT	2596	KLISWLGPDLSVLVNIALNSITNPSK LTSTISSIGEKAINDLLGDG	2596	KLISWLGPDLSVLVNIALNSITNPSK LTSTISSIGEKAINDLLGDG
HP0249	2597	TCACCGAATTAGAGCCCAACAGGCTAACCCCTCTCCCTATCATGAAGCGTTTACCATAAAAGCGGATTTGATTCAG GGCTAAATCTTATGACATGAGCTACATGTATGCTGGCTTCAAGCCATAAGCGGATCAGGAGGTTGCCCTTAGGG CTTTATGATGGGTGCTATCTATTCTAAACGCCCATGAAGATATTGAAATTTACGCAACGCTTTAAACACCATCA ACCACCATGGCATAGGCAATTGAAGGGTGGTGGCAACAAACGGGAATTTTCTCGGCTATGGAATTAGAAAAAGA GCGTTATTCTGCTCATGCTCATTTAATGCGCTTTGAATATTAGTTCGCTTTAATGGTGGTGATGA ACAGGCGTAAAGAAATCGCCCTACTCTTAGCATGGGAGCAGCCAAAAGAAATCCAAAAACCTTTTATTATTGG GCAATATCATTTGGTTAGCGGCTGGCGCTTGGGCTTTAGCGTTTAAAGCATGTATCTTTAAGCGGTGTTCC CTATCATCTCGCTCCAGCGGATGCTATGGCATTAAACACCTTGCCCTTTGAATCTGCTTTAATGGATTTACGCTCA CTCTAATAGG	2598	TELEPTGLTSLPIMKRFITIKGDFDGL SYDMSYMYAGLQAISAIRRLPLGLYD VHVYSKTPMKDIEILRNALKTINHHGIG EGWWQNGNGNFFSAMELEKRALFVLS LIILMASLNISSLLMVVMNRRKEIALLF MGSSQKEIQKTFFYLGNIGLGGVALGV VLAFLSMYLLSVFPIISLPADVYGINTLP LNLSLMDFTLTLI	2598	TELEPTGLTSLPIMKRFITIKGDFDGL SYDMSYMYAGLQAISAIRRLPLGLYD VHVYSKTPMKDIEILRNALKTINHHGIG EGWWQNGNGNFFSAMELEKRALFVLS LIILMASLNISSLLMVVMNRRKEIALLF MGSSQKEIQKTFFYLGNIGLGGVALGV VLAFLSMYLLSVFPIISLPADVYGINTLP LNLSLMDFTLTLI
HP0249	2599	ATTAGCGAATGTTCTCAGTCAAGTGGCTATGGAAAAATCAAGCAAGCCGGGTTTAGGAACTTTATAGAAAAAC GCTCTAAGCCCTTTGAGTAAGGAATGCCCCCTAGCTTGCAAAATGAAACCTTAGGCCAATTTATAGGTCAAAATAAC TTAGATGATTTATTGAATAAGCGGGTCAATGCAATCCAAATATTATCAGTAAACAACTAAGCATTTTGGTA ATTTGTTACCCCATCCATAGAAAACTACCTTCTAAGCAGCTTTTAAAGCATGCTAGACGATAAAGGCTTTT GAATTTATCGGTGGTATATGAACGCTTCTGAATTAAGTTCTATTTAAGCGTGGTTTAAAGATATTACTAATCCC CCTACAAGCTTGCAAAAGACATCGGTGGTAGCGAACGACTTGTGAACGAGTTTAAAGCAAGATGTTATCAA AAAGCTAGAAAGTCAAGGCTTAGTGAGTAATCATTAATAATATCATTTCTCAAGCGGTTAAGCGGCTTTATAA TCAAGGTTTAGGGAGCGTGTGCGGCCCTCTTACAAAACGCGCTCAAGAAACGATTTAGGCACCTCTTTATCGC CTAGAGGCTTGCATGATTTTGGCAAAAGGGTATTTAAGCTTTTAAAGCAA	2600	LANVLSQVAMEKIKQAAGGLGNFIENAL SPLSKELPASLQNETLGLQIGQNNLDD LLNNSGVMNAIQNIISKLSIFGNFVTPS IENYLAQSLKSMDDKGLLNFIGGYM NASELSILSWLKDITNPPTSLQKDIGV VANDLLNEFLGQDVKKLESQGLVSNII NNIISQGLSGVYNQGLSVLPPSLQN ALKENDLGTLSPRGLHDFWQKGYFN FLS	2600	LANVLSQVAMEKIKQAAGGLGNFIENAL SPLSKELPASLQNETLGLQIGQNNLDD LLNNSGVMNAIQNIISKLSIFGNFVTPS IENYLAQSLKSMDDKGLLNFIGGYM NASELSILSWLKDITNPPTSLQKDIGV VANDLLNEFLGQDVKKLESQGLVSNII NNIISQGLSGVYNQGLSVLPPSLQN ALKENDLGTLSPRGLHDFWQKGYFN FLS
HP0249	2601	TTTAGAAGACATTGGCAAAATCACCGTTTCCACTAATTTAGGGCAATTCACATTAAGGATTTGGGAAAGTCATCAG CCAGTCTCGCACCCGTTTGGGTTTGTACTAAGATGGGTGGCGAGACACAGAGGCTTGGTGCTTTCTTTAA AAGACGCTAACACCAAGAAATCATCACTCAAGTGTATCAAAACTAGAAAGATTAACCCCTTTTACCGAATGGCG TGTCATTAAATGTTTATGATCGCTCAGAAATTTACGCAAAAGCCATTGCCACGTTTCTAAACCCCTCATTGAAGC CGTTGTTTAAATCATCATCACGCTCTTTTATTTAGGGAATTTAGGGCAGCGTGGCTGTGGGGTGATTTTACC TTAAGCTTGTCCGTGGCTTTATTTATCAAGTTTAGCGATCTGACTTAAATTTGATGAGTTAGGGGATTTGTT ATCGCTATAGGCATGCTCATTGACTCAGCCGTGGTGGTGGAAACGCTTTGAAAAATTAAGCGCTAACACTAA AACCACTAAACTCCATGCAATCTATCGTGTAAAGAAATCGCTTTCAGTGGTAGCGGGGTGGTGATCATCA TTGTGTTTTTGTCCGATTTAACCTTACAGGGGTAGAGGGTAAGATGTTAGCGGTTTAGCGCAAGCATTTGT ATGCGCTTTTAGGCACCTTAGTTCTATCTATTACAATCATTCCTGTAGTCAGCTCTTGTCTTAAAGCCACGCCCA TAGCGAAACCTTTTAAACGAGGTTTTTAAACAGAAATCTACGCCCTTTATTGGAAATTTTGTG	2602	LEDIGKITVSTNLGHLHIKDFAKVISQSR TRLGFVTKDGVGETTEGLVLSKDANT KEITQVYQKLEELKPLPNGVSVINVFY DRSEFTQKAIATVSKTLEAVVLIITLFLF LGNLRASVAVGVILPLSLSVAFIFKFSD LTLNLSLGGVIAIGMLIDSAAVWVEN AFEKLSANTKTKLHAIYRSCKEIAVSV VSGVVIINFFVPILTQGLEGKMFRLA QSVYVALLGTLVLSITIPVSVSSLVKATP HSETFLTRFLNRIYAPLLEFFV	2602	LEDIGKITVSTNLGHLHIKDFAKVISQSR TRLGFVTKDGVGETTEGLVLSKDANT KEITQVYQKLEELKPLPNGVSVINVFY DRSEFTQKAIATVSKTLEAVVLIITLFLF LGNLRASVAVGVILPLSLSVAFIFKFSD LTLNLSLGGVIAIGMLIDSAAVWVEN AFEKLSANTKTKLHAIYRSCKEIAVSV VSGVVIINFFVPILTQGLEGKMFRLA QSVYVALLGTLVLSITIPVSVSSLVKATP HSETFLTRFLNRIYAPLLEFFV

HP0249	2603	CGCAAGGCTATAAGGGCGCTAGTGGGTGAGCGATATTATCACGGCGTTGGGGAATTAGCGTGAGCGGGAATTA TGATGTTGGGCGGATTATCTTTAGTATTTAGTCTAGTGAATCTATTAGTGGTTACTAATGGCTCTACTAGGGTTACT GAAGTGAGGCGCGGATTGGCCCTAGATGCTATGCCAGGAAGCAATGGGATTGATGCGGATTTAACTCAGGAC TTATTGACGATAAGGAAGCCAAAACGGCGGCTCTAAGCCAAAGCGGATTTTATGGCGCGATGGATGG CGCATCTAAATTCGTCAAAGCGGATGCGATCGCTTCTATCATCATCACGCTTATCAATATCATTTGGAGGGTTTTAGT GGCGGTGTTCAAAGGATATGAGCTTGAGCTTTAGCGTAGCACTTCACTATCTTAACCATTTGGCGATGGGCTTG TGGGCAATCCCTGCCCTTAATCATTTGCGACAGCGGCTATTGTGCCACTCGCACCGCAAAATGAAGAAGA GGACTTTGCTTCCAACTCATCACAGCTCACCAATAAAGCAAACTTTAGTATTGGGAGCGATTTTATTGCT TTTTGCCACCATTCCTGGACTCCCTACTTTTCTTAGCGTTGTAGGACTCTCTTTTATTCATCGCATGGCTGATT AGCAGGGAGGGAAAGACGGGCTGCTCACTAAATTAGAAAATTATTGAGTCAAAATTCGGCTTGATTTGAGCGA AAACCCACAGCTCCAAATCAACCCACACCCCAACCAAGGCTAAACCAAGAGAGCTTAAAGAGAAAG AAGAGCAAGCGATTGATGAAGTGTAAATTTGAATTTTAGAAGTGGCTTTAGGCTATCAACTCATCAGCTTGGCGG ACATGAACAAGGGGCGATTGTTAGAAAGGATTAGGGGTATTAGAAAAGATAGCGAGCGATTATGGTTTTTTG ATGCTCAAAATCCGGATCAG	2604	QGYKGPSAVSDIITAFGEFSVSGNYVIC AIFSVLVNLLVWTNGSTRVTEVRARF ALDAMPKGQMAIDADLNSGLIDDKEAK KRRAALSQEADFYGAMDGASKFVKGD AIAIIITLINIGGFLVGVFQRDMSLSFS ASTFTILTIGDGLVGOIPALIAATATGIVA TRTTQNEEEDFASKLITQLTNKSKTLVI VGAILLTFATIPGLPTFSLAFVGTFLFIA WLISREGKDGLLTKLENYLSQKFGLDL SEKPHSSKIKPHPTTTRAKTQEELKRE EEQAIDEVLKIEFLELALGYQLISLADMK QGGDLLERIRGIRKKIA'SDYGFLLMPQIR IRDNLQLPPTHYEIKLKGIVIGEGMVMMP DKFLAMNTGFVNKEIEGIPKEPAFGM DALWIETKNKEEAIQGYTIIDPSTVIATH TSELVKKYAEDFITKD
HP0249	2605	ATTACTTTTAAAGCCCTATTTAGGATTTGAGCATATTAAACGAAGTGGCTTTGGAAAAAATTGATTCCTATTACAG CCGATTAAATTAGCCAAACCAATCCCCCATGGCTGGATATGGTTTAGTGAATCCTTATTGTTTGAGGGAATACAG CTTTGTGATACCCAAATACATAGAACTACTGCTAGAAATTAGATCTCATTCCAAAGTGGAGGTGATTGCGTGGTGGT GTTGCAAAAAAATTAGAAGATTCTATGTTAATTTCTAGCCCCCTTAGTGTTAATTCCAAATGCTTTGGCGCT CAAGTGGCGCTTCTATGATGATTATCCGGAATTTGGCTTAGGATCCTTTAAAGCTTTGTGATTCAGAAAGA GAACGAGCTTAAAGTTTTAGCATGAATTCGCTCTACAGGGGAGGACAGGGGCGCATCTCTATCGCTAA GCCTTAGCCATAGAAATTAGAAAGCAAGGATAGAGCTATTTATTTAGGCTCCACTACGGGCAAGATAAAGAAATG GTTGAAATAGCCCCATTATTAGCGAACGCTATTTTCAACACGCAAGCGGTGCTCAATAAAGCTTTTAA ATAGGCTCTTATTCTTGAAGCTAAAGCCGCTTTAAGGCTAAGAGATTTTAAACACACACAGATCACGCACACC ATTAGCGTGGGGTTTTAGCGCAGGGCGGCAAGTTTTGCAAGCTTGCTCAATAAATACCCCTTATATCCATGA GCAAAATCGGATTAAGGCTCTCAATCGCTACCTTTCCCTAAGCTAAGCGGTGTTTCAAGCTATGCCTTTAA AGATAAGGAAATCATGTTTAACTCCTATCCGTCGCAAAACGCTTTTTTGTATTGCTAGGACTCGCACGGAAAT CAAGCACATTTATTTTAGCGGTTGCGCAAGGGGCAAAAGCGATCAATGAATTCGCTTATTAAACGCTCCCAAACT CACCAACAA	2606	YFLKAPILGFEHINEVRIEKIDSLFSRLIS QTNSPMAIDMVLVNPYCLREYSFVPIK YIELLELDSSHKVEYCVVWLQKNLED SMVNFAPLVPNSKNGFGAQVALSMM DYPDFGFRDPLKSFVIERERA
HP0249	2607	GTAGTAGTGGCACTACTTGCTCCGGTTGGCTTATCAACCTTTAGGGGCAATCCCCACCAATGGAGTGAGCGATACG AATAATTTAATTAATCTGCTCACTGAATTCATTAAACCCCGGTTATCCAAATAATGATAGTAGTGTATCTACTA GTCCTACAAGCGCTTTTCAAGCCATTACGAGCGCTATTTCTCAAGGGTTTCAAGCCTTACAAACGATATTAGCCCTA ATCGGATTTAACCTTGCTCCAAGAGATTACTTCTAACACACCAACCATTCAGTCATTCTCGCAAACTTACGGCAGC TTTTAGGGGATAAAACATTCTTTATGGCGCAACAAAGCTCATTGATCGGATGAT	2608	SSGTTCSGWLINLLGAIPTNGVSDTN LINLLTEFIKTAGFIQNNDSVSTSLTSA FQAITSAISQGFQALQNDISPNAITLLQ EITSNTTTIQSFSQTLRQLLGDKTFFMA QQKLIDAM
HP0249	2609	TATGATTTTGTGTAAGCGCCTATTTGGGGTTGAACCATTCATAAAATGCGTTTGCAAAAGATTGATGAAATC TTTTTGCGTTTGAATAGCACAGAGAGAAATCCGTGGTGCTTTACGCTGGTCAATCCCTTTGCCTTAAGAAAATAC GAATTTGAAGTGCCCTACCCCTTTAAATCCTTTTAGAATTAGAGGAGCCAGAGCGTCTAGTCGCTAATATCATG GTCGTTCAAAACCCCAATTGAGCTTTCCACCGTGAATTTATAGCCCCCTTAAATTTCAATTTGACAAAGCAGCTCATG GGGCAAGTGTTTTGATTCTAACAAATACCCACACTACCATTTAAGAGAGAATATTCTAAGCCACACGCGCATGAATGA TGCAATAAGCGGTTTCTATGCAAAAGCGTTTCTTGAAGCTTATGGCGCAATGCGTGTGTTTTGCAAAATACAAGCGA GCGGTTTTCTTATGGTATAATAGCGGT	2610	MIFDVKAPILGFETHIKMRLQKIDEIFLR LNSTEENSVMVSVFTLVNPFALRKYEFV PTPLKILLELEGAKSVLVANIMVWQTPIE LSTVNYLAPLJFNLDKILMGQWVLDN KYPHYHLRENILSHTHE

HP0249	2611	AAGACGCTGCGGTTTCATCTATGAGATCAGCGAGTTCATGAAAGCCTATACCGCATTGCTAAAAAACAAGACCGA TACGCTATTTATTGAGGTATCTCCCTCTAGTATTGGCCAGCATTTAACGACTGCCCTTTATGTCAAATACCCCT GATTTGACGCTTTGAAAAGCTTTGGTCTTATTATTACCAACTTGGATTGAGGAGGACGATCAGCGCATC AAGCAAAACCATGATCAACATTATCAAAACGTTAAAGCAATAAGAGCGTTGAAACCATCAAGAGAGCTTATATTGAAT AGCATCGACTCTTATAACACCTTTGATCAATACCTCTATACTTATGGGATAGCTCTCTGTTTATCATAGCAATGGG TGGCTCTGCTTAGCCCTAGCTAATTTTCATGGCAGATGAAGAGAAACCCCATTTTATCGCTATGGATGCCGAA CCCAAGTGAGCATATTTGCCACAACGCCCAAGAGGAGGAGTCAATGGAACGCGGATTTTGACAAAGAAAGAAAGA GAAGATGGGTAATAATATCGGAAATTAACCTTTTAAAGCGTAAAGAACGCGCATGCTTTAAACGGGATTTT GATGAAAAAGAAAAATTTATGGAGGCAAGACACGCAAGTATTAGCTGTTATGACATCACTAAAGAAATTGTAT AGCAATTATAGGAAGTGAATGAGAAAGTCCCTCCAGAGCGGATACAAATCTTTGTATAACACTATCACGCCCTGTTTA CACATAGAGGGCAA	2612	DACGIYEISEFMKAYTALLKKQDRYV LLRYPSPRYWASILTALVYKYPDFDAL KKLLVSYYYQTWAGGTITRIKQTSINI NVKSNKSVETIKELILNSIDSYNFTDQYI YNLWSSSVYHSKWVRPVLALANYFM ADEEKPHFIAMDAETQVEHILPQTPKR GSQWNADFDKEKREEWVNNIANLTLL KRKKNAHALNGDFDEKRIYGGKDT KVISCYDITKELYSNYRKWNEKSLQER YKSLYNTITPVLHIEGQ
HP0249	2613	GCTCAAAACGCCCTTCTACAAACGCCCTTGACITTAGACGCTAAACCTTAGCCACCAAGCTTTAGTGGGAGATTC CAATTTGATTTCTGCTAAAGCCCAAGCAATGCCATTTGTTTGCATTTGCAATGCAATGCCCTATACAAATGAAGAAACAATTAC ACGCAATACCTTTAAGCGTGATGTTGCCCTTGATGCTGCTCATTTTATTGCGATTGCGATGCTCAATTTCAATTCAAA AAGCCTCTAACATGCGAGAGCTTTTGATCAGTATTGTAGCGAATGTGTGTTAGTGTGTTGGGGATGGGCATG GCGTTTATTTAATCTCATTGGCATGGAAAGGCATTATGCGCATTTG	2614	LKNAFLQALTLDKATLTKALVRDSNL ISAKAQAMPVILQLHALYNEENNYTQYL LSVMLPCMWLIFIAIGMLNFIQKASNM ELLISIVANVCVFSFWGMGMMAFYFNLI MEGHYAH
HP0249	2615	CTTTATGCGCGTTATTCATTTTAGAAGAGCGTTTGAAAGCTAACGCTAAAGAGTCTGTTAGGCTTTACAAAATAAAG GCTTAGAATTAGAGATTTTAAAGGGGATAATGAAAGCTCGGTTAAGGAGTGGCGGAAAAAATTAGGATTTCTAAT ATCATGCCCATTTGACCCCTGAAGATAAGGCTCAAAACCATCAGCTCTTATAAGGCGCTTTCGCGATGGTAGCGGAT GGCAATAATGATGCGTTAGCCTTAAACAAAGCGAGCGTTCTTTAGGTTTGAAAGAGCGCTTTGAGTAAAGCGC ATGCGATATTTGCTTTTAGAAGAGGATTTGAGTTTGCTAAAGAGCGTTGATACGCTCAAAAGTCTATCAAGTG GTGTTGCAAAACATTTGTTGAGCTTGATTTAATACGCTATTTAATCCCGTCTGCTATGCTAGGATACATTAACCCCTT TAATAGCGAGTTTGAGCATGAGCGCTAGCTCACTCTTAGTG	2616	LCALFILEERLKANAKEVVQALQNKGLE LEILSGDNESVKECAKLGISNYHAHL TPEDKAQTSSYKGVCMVGDGNDA LALKQASVSLGFEKSALSACDILLLE EDLSLLKKAFDNAQKVYQVWLQNVLSL IYNAILIPVAMLGYNPLIASLSMSASSLL V
HP0249	2617	AAAAGAGACGAATGAAAAGCTTCTTGCAATGGATGAATTTTAGAGGATTGAGCTTTAGGCGGGAACGCATCAA CGATTTAGAAAGAGTGGTGGAGTGAATAGGCTGAAGAAAGAAAGAGAGGCAATTTTCCAGTCGTTGGATG TCGCTGGGATTACCGGCTTCAAAAGCTTTATCATGGCCTTATCCCTAATGACTAGCCGCTAGAAATCCTATCGG CGGTTTCAGCGGCTTTAATAAAGAAATCCACCTATTTGCTATGCTGCAACCAATACCGGCTTGAATTAAGC ACCGCTAATAACACCCCTGTGTATGCGAGCGGAGCGGTTAGGTTAGCGCAATTTGAATAAATCGTCGTAAAA TATGGGAATTTGATTAAGTTTCCACCTTTTGTTTAAACCTACTACGCCCATTTGAATAAATCGTCGTAAAA CGGCGGAATTTGTCAAAAAGGGCAGTTGATTGGGTATAGTGGTATAGTGGTATAGCAAGGATGAGCACAGGCGCATTTGCA TTATGAAGTGCGTTTATGATCAACCCATAAACCCCATGAGTTTACCATAATGGAACATGAAGATTTGAAGAAGTT TTCAATAAGAAAGGAGCATCAGATGGCAATCTTTGATAACAATAATCGGCTAATGCAAAACAGGACGACGGA CTATCATCGCTCAAGGCACAAAATAAAGGGGAGCTTCATTTAGATTACCATTTGCAGTAGATGGCGAATTAGAA GGGTGGTGCAATCTAAAGCACGCTGGTGATCGGCAACCGGCTCGGTAGTGGGTGAGATTTTACTAATAAAT TAGTGGTCAGTGGCAAGTTCACTGGCACGGTGGAGGCGAAGTGG	2618	KETNEKLSQMDEFDDDLQLSGERIND LEEVGVNRPREEKEEGNFSSRLDVA GITGLQKSFIMRLIPNDYPLESYRRVSA AFNKRIHPILHVLHNHTGLDSTAINTPV YASASGWGLASKGWNGGYGNLIKVF HPFGFKTYAHNLKNVVKTFGEFVKKGQ LIGYSGNTGMSTGPHLHYEVRFDDQPI NPMSFTKWNMKDFEEVFNKERSIRWQ SLITIINRLMQKQDQRLSSLKAQK
HP0591	2619	CCTCATTGCGATCAGATGCGTTATTACTAGGGGCAATTAATAATGGAATCACGCTTTTGACCCCATAGACGC CCACTTGCAATGCGAGAAACGCACCTTTAAAGCGGTGTTAGGATATCTAGCGAGCTTTTAGTGTGCGAGTGA TCATGCCCTAATCTAGTAAGCCCTTGAATGACACTCCACCCCTTGAATACGAAGAAGAAATTTAAACCATCTT CAAACTCAAGCCTCTAATGAGTTTGATTTCAATGATGCTTGAATTTAGAAAGATTTGAATGCGCAAAAGAAAG GCGTCAGGTTTAAAGCTCTACCCCAAGGCATGACCACAAACGCGCAATTCGGATTTGTTGGGTGAA AAACTTTAGAGTTTAAAGAAACGCCCAAAATAGGCTTTATTTATGCATCCATGCAGAACAAACCGGTTTGT TGATAAAGAAATTTATGCCATAGCGT	2620	LIRIRVRYLGGN

HP0591	2621	AGAATAATTGCTGATTTGCATGGCAATTTCAACGGACTAATATCTTTTTAACGAATAATTTAATGTCGGCAACCC TAACGCTGGCGTGGCGACGATTAAATTTAACGCTGATGAAACCTTGAACGCTGACGGGTTAAATTACACGAATT TCCAACCCGTTGGCTTTGGCTTACAAACCAAGTCGAGCCAGCATTCATGGCGAAATTTAATCCAGCTTTCTATG GAGATTAAAAATCTAACTTTAGGATTTCACATGGGAGGCTTTAATTTAATTCAGGGCGTATCAGCTTTTGAAACA CCACTTTTAGCGGCTGGACCAATATTAAACGGAGCGACTGAGCGGCTCATCGTATGTGAATATGGTTCGAATACG GATTGATATTTCTAATTCATTTTAGGAGGGGCTTCGCTATGATTTGAAAGCTAATAACATATTTCATAACTC TCAATGGTTATTGATGTGCTAAGAATGTGAATCAGTCATCATGAATGGGAATGTTACTTTCAATAATCCAGGCTT TCAGTCAAGCCCAATGCGGCTATTAATATTGGGATAGCCAAACCGCTTTTAGAAAAACGCTTCAAGCCTTTC TTTTTACAACAACAGCGTGGCAATTTTAACGGCACACCGCTTTTAACGGGTGCTTTATTGAAATTTGAACCCCTAA CGCTCAAGTAAGCTTCAATCAAGTAAATTTCAATAACGCTAATGTAACCTTTTATGGCATCTTTATTGTAACCAACG CCTGATTTTGGCAACTCTGCACGCCCTTATCAATTTCAAAGGGAATACGAATTTAATCAAGCCACGCTCAATTTAAGG GCTAAAAATATCCATATCAATTTCCAAAGCGCTTCTACTTTTAAACAAAACCTCAGATGAATTTAGCTGAAAGTCCC AAGCGAGCTTTAACGCTCTTAAAGTGGAAGGGGAAACGAATTTCAATCTCAATAACTCAAGCTTGTGAATTTCAATG GCAATAG	2622	NNLLYLHGNFNATNIFLNINFNVGNPN AGGATINFNADETLNADGLNYTNFQT VALGLQTSASQHSWANFNFSKLSMEIK NSNFRDFTWGGFNFNFSGRITFENTTF GWTNINGATESGSSVVMVANTDLIFS NSILGGIRYDLKANNIIFNNSQMVIDV SKNVQSSLLNGNVTFNNSRLSVKPN AINIGDSQTQTALENASSLSFYNNNSVA NFGTTFANGVSYLNLNPNNAQVSFNQ VNFNANVTFYGIPLFGKT?DFGNSAR LINFKGTNFNQATLNLRAKNIHINFQ VSTFKQNSTMNLAESSQASFNALKVE GETNFNLNSSLNFGNSVFNAPVSF YANHQSISFTKLATFNSDASFFDLSSNS TLNFQSVLLNGALNLLGNGSNNLAINA KGNFSFGSKGILNLSYMNLFGGDKKTS VYDLQAQNIIDGLMGNGNGYEKIRFYGI QIDKADYSFDNGVHSHWRFTNPLNTTET ITETLHNNRLKVQISQNGVS.VNKMFL APSLYDYQKNPYNETENSYNVYTSKV GTYLTSNIKGFNQNNKTPGTYNAQN QPLQA
HP0591	2623	CTGGGGCGTTGCTAAATGCTTTAAGAGAAATCGGTATTGTTGTGAAAGCGGATTATAGAAATGGGGGTATTA AAGCCAAAAATTATGATTTAATCACGCCCTTAAAAAGCGAGATTTTGCCCTAGATGAAGAACCAAGAAAGCGCAAA AAACAGCCATTCAAAACGCTATCAAAAACCAAGATAGCATAGGGGTGTTGATTAGAGCGAGGAGCATAAAA ACCAATCAAAAGCTCCCATTTGGCTTAGTCAAGGGCTATACGCTAAATTAGACGCTAAAAATCGCTGAAGCGATGAT GGGCTTAATGGGTGAAAGCGGTTGAAATAGGCAAGGGGTAGAAAGCTCTTTATTAAAAAGGCTCAGAGTATAAT GATTTAATGGATCAAAAGGGGTTTTGAGCAATCGTAGCGAGGGTTTTAGGGGCGATGAGCAATGGGGAAAGAA TCATTGTTAGAGTGATTTCAAAACCCACGCCAAGCATTTTCCAACTCAACGAACCATAGACATTAATGGCAATGAGT GCGAATGCTTGTAAAGGGCAGGCGATGATCCTTGCAATGCGATTAGAGGGAGCGTGTGTGCGAGAGTTTGTAGC GTTGGTGTGCTGATGTTGTTACTCAATTTGACTT	2624	GAFAKMLLREIGVIVCESGIIIEIGGIKAKN YDFNHALKSEIFALDEEQEEAQKTAIQN AIKNHDSIGGVALIRARSIKTNQKLPGL GGGLYAKLDAKIAEAMMGLNGVKAVEI GKGVESLLKGSEYNDLMDQKGFLSN RSGGVLGMSNGEEIVRVHFKPTPSI FQQRITIDINGNECECLLKGRHDPICAI RGSVVCESLLALVLADMVLLNL
HP0368	2625	CACGATTGAAAGAAAAATCGCTAACGCTAAGGTTTTGTCCCGGTGAGTGGGGCGTGGATTCTACGGTGGTCGC TAGCGTGTTCACAGAGCCATTAAAGGATAATTTGATCGCTGTTTTGTGGATCATGGCTTGTTCGCTAAAAATGAAAA AGAAAGGTGCAAGCGATGTTAAGGACTTGAAATCCCTTTAAACACGATAGACGCTAAAGAGTCITT	2626	RLKEKIANAKVLCAVSGGVDSVTVATL LHRAIKDNLIAVFDHGLLRKNEKERVQ AMFKDLKIPLNTIDAKEVF
HP0368	2627	CTAACCAATGCGCGTGAAGCATCAAGTAGGGGATTGCCACITTTAAATTTGGTGCTAAAAAAAATGCTAAAGAA GAACAATACAGCAAGATGAAGATTGAATGAGCGATTGAGAGAGTTGCTGAACGCTCATAGAAAGCGGTGAGAAA AAAACTGCAAAAATTAGGGATTATGAAAAATATAGAAAAATTTGGATTAGAAAGCCCTTAGACGCTACTATAGT TCGCCCTACGTGAATTGGAAATTTTAAAAAGAAATAGAAAAAATGAGAGCTTTTTTAATTCITCTATGCGTGAAAAAG CTAAGCCCAATTAAAGCAAGGCAAGCAAGAAATGCCCGCCAAAC	2628	NNARERIKVGGGLPTFKFGAKKNAKEEQ YKQDERLNERLREFAEITLIESVRKKLQ KLGDYENIEKILDLEALRRY"SSPISEL EFLKEIEKNESFF

HP0368	2629	CGTCTGCGTTTAAAAATTAAACTCCAACCTCAACGAGAGAAATAATCAACCGCTATGTTTCTCAAGCTTTGGGGG ATTTAAAGGTTTATACGCTAAAGTAGAACACCAATCTAAATCTATTTACGCGCCTAGCTATTTGAA AGCCTTTAAATAGAAAGCCTATTACACCAACCACTGAAAGCCCATTTAAAGAAACGCAAAACCCCTAAAGC CCTAGATTACCCCTTTGATTTAAGACTATCAAGCGAGCTGAAAGGCTTATCAAAACCAAGTTGTTAAAGC AGAAACCCCTAAAGCGTGAATGTCAATTGCGAAGTTTGAAGCTTCACTAAAGCAATTTTAAAGCTCAA ACGCGCTTGTACGATAATACGCTGCGCAGCTCTAGGGCTTAGAGCAATTTCAAACTCAACGCGTTGTACGATAA GTGCAAGTTTGGCAATAGTGAGCAGTCTAGGGCTTAGAGCAATTTCAAACTCAACGCGTTGTACGATAA TACGCGCGCACGCCCTCAGAGCTGACCACTGCGATCGGTTTGTGGGTGCAAGTTGTAGCGAATA ACGAGCAGTCTAGGGCTTAGCGATGCCCTTTAAATCTCCCGCACTTGCATGCTTTGTTTCTTAGAGGTTTGT GGCTTAATATTCTTTAAAGACTTCTCAGCGTCAATAAGAAAGCAACGCTTCTTTGAGTTTGAGAGCGGATCGTTTGA TATCCCAACCTCTCCATTCAAAATTTCCCTAACTCCATG	2630	SAFKNLKLQKRRREINRYVSQALGDLK KGFYAKVEHQILKIYFTHPSYLFKAFKIE EAYYTNHLKAHLKETQKTLKALDYFDF FKTIQASVKRAYQKPWKKEPKSV NVNCEGLSDFTKKQFLKLRACNDNTL RTTP
HP0368	2631	TGACCCCTTATAAGCGTTTTATCAGCGGTGAAGTGATGAGCAAGCAATGGGTGTTTTGGCGAAAGACCCATTG CTAACACGGAGTATTCAGCGGATTACGCTCAAGAGATGACGCTAAGACTTGAGCGCTAAGATTGAAAGCATGAAT TTGAGCGCTAGGTGTTTAAATGCTTGGATAAATCGCATCAAGTATGTGGCGAACTCGTGTGATGAGCGAAGA AGAGCTTAAGGGCGTGAAACATGGTAAATCCTATGATGAATCGCTGAAATTTGAATGATTTGGGCTATCC GGTAGGCACAGAATTAAGCCCTGAACAAAGAGAGAGTTTAAAGAAAGATTAGAAATTTAGAGATAAAGGAGTA ACGACTGATGAGACACAAACACGGATACCGAAGCTTGGGAGAACCAAGCTCGCACAGAAAGCGCTTATTAAAGAA TTAGCGATCGCTTTGATTGAGCATAACAAAT	2632	DPYKAFLSAVKVMKSKQLGVFGERPIAN TEYSGDYAQRDDAKDLSAKIESMNL RCFNCLDKIGIKYVVGELVLMSEELKG VKNMGKKSDEIAEKLNDLGYVPVGT SPEQRESLKKRLEKLEDKGGND
HP0368	2633	GGCTTACAAAACACAGGGCTTACATACGATTGAATTAAGATGAGGTGGCGGTTTGGCCAACTCGCTTTAA CTAAATGATGGAGTTATCTTAATGGAGATTAGAACCTTTTAGAACGCGCTTTAAAGAAAGATTAGGCGCATGGGA TTTGTGTTGAAGGGTTAGAAAGATTTAAGGCCACAGCTTGTAGGGCTAAACAAAGAGGGCGTGTTCAG GCGAAATACGCTTTAGAGTTGTGGAATGACCGGCTTGAATGCTTCAAACTGATTAAGGATAAAGAAAGCGCTC AAGCTTAAGACGCTTAAATGGAATTAGGGGATTTAGCATGCTTTAAAGGTTGAGCGCACCTTTTAAACCTT TTGCAACACAGCAGCGGATTGCTTAAAGGAGCGCTTTGTAGAGGCTTAAATCTCATAAAGTGGCTTTGTG GACACGAGAAACGAGACCCCTTTAAGGATCTTTGAAATATTCGCTGCTTAATGGGGAGCGGCAACCCCG CTTAGGGCTAGATGACGCTTAAATGCTTAAAGACACGCAATTAAGGCTGTAAGATCTCAAAAGCTTTTAAAGCA TGCCAGAAACCTTGCCTTACCGCTAAATGAATGCGAAAGCTTTGAAGAGGCCAAACGCCCATGA ATGCGGGAGCGGATATTGTGATGTGCGATAATTTGAGCGTTTAGAGACTAAAGAAATTTGCGCTTATAGAGATCGG CATTATCCCTTTGTTTACTGGAAGCGAGCGGGAACATTTCACTAGAGAGCATTAAACGCTTACGCTAAAGCGCGCT GGATGCCATTAGCGTA	2634	AYKNHRYANTIELKDEVARLAKLTK MMELS
HP0368	2635	CCAAACAGCACCGCCCTATTGTTTCTATACAGATAATGATTGTGATGGCATGTTAGCTGGCAGCGT	2636	KQHRPIVFTDNDGMLAGS
HP0005	2637	GATTCGGATCGCGCTAAACCAAAATGGCTAAATCCCAATTAAGGTTGGTGGTGGATCGCTAAACGATTACGA GCAGAGGCTTACCATCTTGATTTGATTCAAGAGGGCAATATTGGCTTGTATGAAGCGGTGGATAAGTTTGAGCAT GAAAGGGCTTCAAGTTTCTACCTATGCGACCTGGTGATCAACAAAGCTATCAGCAGAGCCATAGCCGATCAGGC CCGCACTATCCGCATCCCATTCACATGATTGATACGATTAAATCGCATCAATAAAGTCATGGCAACACACATTCAAGA AAAGGCAAGAGCGCTGATTAGAAAGTGGTGGCTGAAGAAAGTGGGCTTTCGTTAGATAAAGTGAAGAAATGTGATTA AGGTGACTAAAGAGCCT	2638	ISDRAKNKMAKSNLRLVSIKRFSTR GLPFLDLIQEGNIGLMKAVDKFEHEKG FKFSTYATWWIKQAISSRAIQARTIRIP IHMIDTINRINKVMRKHQIENGKEPDLE VVAEEVGLSLDKVKNVIVKTEP

HP0005	2639	CTTACATGAGGACCGATAGCTTGAATATCGCTAAAGAGGCTTTAGAAGAACGCGAATAAGATTTAAAGACTATG GCAAAGACTATTTACCCCTAAAGCCAAAGTCTATTCCAGCAAGATAAAACGCCCAAGAACGCCCATGAAGCGATC AGGCCACTTCTATTATTTAGAGCCAAACGCTTTAAAGACTACCTTAAGCCTGAAGAAATTAAGGCTCTATACCTTAA TTTACAAACGCTTTTAGCTTCTCAATGCAAGACGCTCTTTTGAAGCCAAAGCGTGTGTGGCTTGCAGAAAAG GCGAGTTTAAAGCGAGTGGGAGAAAGCTCCTTTTATGGCTATTATAAATTTAGGCAATGACGATAAGGACAAAT TGCTCCCAATTTGAAAGAAATGACCCCATTAATTAGAAAACCTAGAGAGCAACGCCCATGTTACAGAACCTCCAG CACGCTATTCTGAAGCGAGCTTGATTAAAGTTTAGAAAGTTTAGGCATAGGCGCCAGCACCTACGCCCCCAACG ATTTCCCTTTACAAAACAGAGACTACATCAAGGTAGAAAACCAATCAGTGCCTTAGAGAGCGCTTTTAAAGGTG ATAGAAATTTAGAAAAGCATTTGAAGAAATCGTGATTCCAAATTCAGCGCTTCTTTAGAAAGAAATTTGGACAATA TCGCTCAAAATAAGCCGACTACCAAGCAAGTCTTAAAGGACTTTTACTACCCCTTATGATAAAATTTGAAGCTGGGA AAAAGAAATATCATCTCTCAAAAAGTGCAATGAAAACCCGCTCAATCATGCCCTAAATGCGGTGGGAATTAGTCAAAA AAAATAGCCGTTATGGGAGTTTATCGCTTGCAACAAATACCTAAATGCAAAATATGTCAACAAACTGAAAGCGCTA ATGATGAAGCCGATCAAGAATTGTGCGAAAAATGCGGAGGGGAAATGGTGCAAAATTCAGCAGAAACGGGGCGTT TTTAGCTTGCAA	2640	YMRDLSLNIKAEEARNKILKDYGK DYLPPKAKVYSSKNKNAQEAHEAIRPT SIILEPNALKDYLKPEELRLYLIYKRFL ASQMDALFESQSVVWACEKGEFKAS GRKLLFDGYKILGNDDKDKLLPNLKE NDPIKLEKLESNAHVTEPPARYSEASLI KVLESLGIGRPSTYAPTISLLQNRDYIK VEKKQISALESAFKVIEILEKHFEIEIVDS KFSASLEELDNIAQNKADYQQVLKDF YYPFMDKIEAGKNIISQKVHEKTQS CPKCGGELVKKNSRYGEFACNNYPK CKYVKQTESANDEADQELCEKCGGEM VQKFSRNGAFLACNNYPECKNTKSLK NTPNAKETIEGVKCEPCGGJIALKRSK KGSFYGCNNYPKCNFLSNFKPINKRC EKCHYLMSEIRYRKKAHECJCKCE.
HP0005	2641	CTAAACGGATTATTCTGAGATTGACAAACAGCCAAAGGCTAAAAAAGAGCTAAATTCATTGAGTTAGCCAAATCGGG ATACGATTGATCCTAACAGCAAGAACGCGCAAAATGGCGTGATTTGGGAAATTCAAAAGAACCCAAATGGCTCCG GATTTTCTAAAGCCGCTTTCGCTTAACTCCTGGGATTACACTAAACCCCTGTTAAACACAGAGTTTGGTTATCATA TTATCTATTTGATTTCTAAAGATAGCCCTGTAACTTATCTATGAACAGGCTAAACCTACCATTAAAGGGGATGTTACA AGAAAAGCTTTTCCAAAGACGCATGAATCAACGCATTGAGGAACCTAAGAAAGCACGCTAAATTTGTTATCAACAAGTA ATTGATGAGGTGTTATCATGTTAGTTAAAGGCAATGAAATTTATTGAAAGCCCATAAAGAAAGTTATGGGGTGGGG CGTTTAAATTCGTGAATTTTGAATGCTAAACGCTATTTTGAAGCAGGAAATGAGGAAATTCGCCGCTTTTCATTCA AACGAGTGAGGGAGCGATCAATACATGCGGATTGATAGCGGTTAG	2642	KRISEIDKQPKAKKEAKFIELANRDTID PNSKNAQNGGDLGKFQKNJMAPDFS KAAAFALTPGDYTKTPVKTEFGYHIYLI KDSPTVTTYEQAKPTIKGMLQEKLFQE RMNQRIEELRKHAKIVINK
HP0005	2643	CGCTCTATGGCGGATTGCGCGGAATTTGTTGCATAAAATTCAGGGATCACGATAGATATTGGAGGGGGTAG CACCGAGTGCGCGTTGATTGAAAAGGCAAGATTAAAGCACTTAATCTCGTTGATGTTGGGACGATTCGCATTAAG AAATGTTTTAGACAAAGACTTAGAGGTCAAATTTGGCTAAAGCCTTTATCCAAAAGAAAGTCTCTAACTGCCCTTAA ACACAAAACGCCCTTTGGGGTGGGGGACGATCAGAGCGTTGAGTAAGTATTGATGAACGCTTTTGTACCCCT ATTGATCTTTGCATGGCTATGAAATAGATGCACATAAAATTTAGCGTTTATTGAAAAATCGTCATGCTCAAAGAAG ATCAATTACGGCTTTAGGGTGAATGAAGAGCGTTTGGATAGCATCAGGAGCGGGCGTTGATTTATCAGTCGTT TTGGAGCATTTAAAACCTCTTAAATGATCACTAGTGGGTGGGGTGAGAGAGCGGTGTTTGAAGCATTTAT GCGCCATCATACCATAAATCCCCCAATATCAACCCCTCTCTCATCTCTTTAAAAGATCGCTTTTGCCCCATGA AAAGCACAGCCAAAGTCAAAAAGAAATGCGTGAAATTTGTTGAAGCCTTATCGCCTTGATCAAAAATAGATGAAAA ATACCTTTTCCATTTAAAGATTGCGGGGGAAATTAGCGAGCATGGTAAGATTTAAGCGTCTATTAGCCCCACAAGCA CAGCGC	2644	LYGCIACANLLHKNSGITIDJGGSTEC ALIEKGKIKDLISLDVGTIRIKEMFLDKDL EVKLAKAFIQKEVSKLPFKHKNAFVGV GTIRALSKVLMKRFCCYPIDSLHGYEIDA HKNLAFIEKIVMLKEDQLRLI.GVNEERL DSIRSAGALISVLEHLKTSI.MITSGVG VREGVFLSDLRHHYHKFPNPNPSLIS LKDRFLPHEKHSQKVKKECVKLFEALS PLHKIDEKYL FHLKIAGELAS3MGKILSVY LAHKHS
HP0005	2645	AACCGCGACAACCAAGACGGCGTAACGATCACCACTACCTATAATAACAAAGCCACCGTCAAAATTTGACA TCACCAATAACGCTGAACAGCTGTTAAATCAAGCGGCAACATCATGCAAGTCTTAAATACGCAATGCCCTTAGTGC GTTCCACGAATAACGAAACACTCCAGGGGTGGTCAACCATGGGTTTAAAGCACATCCGGGAATCGGTGCAGCAT CTTCCAAACAAGAAATTTAGCCAGTTACTAGCATGATCAAAAACGCCCAAGAAATAATCGCGCAAGCAAAATCGTTAG TGAAAACGCGCAAAATCAAAACAACCTTGGATACTGGAACCACTTCAACCCCTTACACGGACGCCAGCTTTCGCGCAA GCATGCTCAAAAACGCTCAAGCGCAAGCAGAGATGTTCAATTTGAGCGCAACAAGTGAAAAGAACTTGGAAATCATG AAAAACAACAATAATGTTAACGAGAAATTTAGCAGGATTTGGAAAGAAAGTAATGACCAATTTTGTAGCGCCTTT TTGGCAAGCTGCAAAGATGGTGGCACATTTGCCCTAATGCAGGGGTTACTTCTAACACTTGGGGGGCGGTTCGCGCT ATGTGGGAGAGACGATAAGCGGCCCTAACCAACAGCATCGCTCACCTTTGGCACTCAAGAGCAGCATACAGCAAGC CG	2646	TATTTQDGVTTITTYNNNKATVKFDITN NAEQLNQAAANIMQVLNTC CPLVRSTN NENTPGGQWPWGLSTSGNIACSIFQQE FSQVTSMIKNAQEIIAQSKIV/SENAQNI NNLDTGKPFNPYTDASFACISMLKNAQ AQAEFMNLSEQVKKNLEVMKNNNNVN EKLAGFGKEEVMTNFVSAFLASCKDG GTLPNAGVTSNTWAGCAYVGETISA LTNSIAHFGTQEQQIQQA

HP0005	2647	AAAGCGGTGCAACACGCTCACTTTTGAAAGCGCTTTTAAACAAAACGCTTAAATCATGGAAGTTGAAGGGCAAA AGGTGATCGCTTAAACAAACGCTAAACCTGGATTCTAAACAAAACCATGGATTTTAAAGAAAGCCTCTTTGAATGCTTTAGA AATGTTTTCTACCAAAATGACATCTACCTCTTGCTCTAAACAAAGCTAAAGTGGAATTAGAAATCCAAGCTTCAACACAGC AAGGATAAAACGCTCGCTTTCTCTTTTACCCAAAGGTTTTCATTTAGCCCCACGCTTAAACACTCTAGAGTTAAACACC TCTCAGCAAACTAACCTTGACAAAAGACACCAACGAGCAACCCCAAGCCCTTAAACACTCTAGAGTTAAACACC CCCACTAAATTTAAGCCATGCTTATAAGGGCTAGCGGTTAT	2648	KAVQTTLTFETPFNKTPKIMEVEGQKVI VLKNAKLD SKTMDFK EASLNALEMF YQNDIYLLSKKAKVELEIQASNSKDKKF LRFLFKPGFHLAPPPNLKEKSQQTNL AQKDTNEQPQSPPLNTLELKPPLNLSHA YKALAV
HP0005	2649	CACCAATTGTTCAATAAAACCCCATTTAATGCGGATGTGGAGCTTAGATGATGTGTTCAATCAAAAGCGAAATTGCA AGCGTGGTTGCAACGCAATTTTAAAGCCATCTCTAGTCTCGTTCGTGTTGCCCAAACCTTGATGGGTTTCGC TCAATCTTTGTATCAACATGGCAAGCTAGTGAAGCGCACCTAGGGCAACGCTTAGAAGGAGAAATTAGTTAGC GCAACGCTAAACATCGCTAATATCCCCACGCTATCGCTTAATGGAGAAATAGAAATCAGGGCGGAAGTGAT CATTTCTAAAGGATTTGACGCTTTGAATCAAGAGCGCTTAAACGCTTAATGAACCCCTATTGCTAACCCAGAAA CGCCGATCAGGGAGTTGAGGCAACTTGATAGCGAAATCACTAAACGCTAAATGCAATTCATTCTCTGGGCGG TGGCAAGCATCTTTAAATTTTTTAAAGCTTTAAGGAGTGTGGATTATCGTCTCGTTAGGTTTAGCGCCATTCA ATACTTAAGCCTAAACAAACCAACCAAGAAATAGAAACAAATACCACACCTAATAGAGAAAGGGAGGCTTTTT TGCCCTTTTAGACGGCATGGTGATCGTTGTGAATGAATTAATATTCAAAAGGAGCTAGGCTACACGCAAAAATCCC CTAAATTCGCTTGCGCTTATAAATCCCGGCTTTAGAAAACACACACCAAAATGTAGGAGTCATTAAACCAAGTGGGG GCAGCGGGCGATCACACCGTGCTCTTTTAGAGCCTGTGGAAATGTCTGGAGCTATGATTAATAGAGCGACCTT ACACAATTATCTGAAATTGAAAAAAGAAATATCATGCTCAGTGATAGGTCGTTGCTATTAGAAAGCGGCGATGTGAT CCCTAAATCATCAAGCCTTTAGAATCTTATAGAGACGGCTCGCAACATAAAATGAACGCCCAAGGTTTGCCCTAT ATGTTGCGCATGAGCTT	2650	TNSFNKNPHLMRMWSLDDVFNQSELQ AWLQRIKAYPSASFVCSPKLDGVSLN ILLYQHGLVKATTRNGNGLEGEVLSANA KHIANIPHAIAYNGEIEIRGEVIVSKKDFD ALNQERLNA NEPLFANPRNAAAGSLR QLDSEITKKRKLQFIPWGVGKHSLNFL SFKECLDFIVSLGFSAIQVYLSLNKNHQE IEDNYHTLIREREGFFALLDGMVIVVNE LNIQKELGYTQKSPKACAYKFPALK HTKIVGVINQVGRSGAITPVALLEPVEIA GAMINRATLHNYSEIEKKNIMLSDRVVV IRSGDVIPKIIKPLESYRDSQSHKIERPK VCPICSHELLCEEIFTYCQNLNCPARLK ESLIHFASKDALNIQGLGDKVIEQLFEE KLIFNALDLYALKLEDLMRLDKFKIKKA QNLLDAILKSKNPPLW
HP0005	2651	CAACTTTTAGAATTGAAAGGGGCATATCAACACCCGAAAGCCTAAAGAATTGGTTTAGCGTTCAATTAACAGACG ATTTAAAGCGCGGATTTAGCATGAATGCGATCGCTATAGCCCTACAAAGGGCTGATTGATCCTTTTAAAGGG CAGAAATCGGATTGAAATCAAATGATTGAATGCGTGGGGAAGCGGATTAGGTTTTTGAAGACGCTTAAAGGAT TTTAAGATCGCTGCGATTGAGTGCACTTTAGGCTTTAAGATAGCGCCAAACACCAAGAAAGCGGTTTTTGC GTGTA GGATTGTTAAACACCTTTCTAAAGAACGCTTACAAAGTGAATGAATAGCTTCTTATGGGAAAACGCGCTATGA AGTGCTAAAGAATATCAAGAAATTTAGAGTTGGTTATTCAAGAAAAAATAGAAAAATTTAGGGTTTTTAAACAAACGCG CCTTTCAATCTGGAATTAAGATTGTTAGGGTTTTTAAAGCATCAAAAAAGTTTAGAAAGTTTACGCTACCCCTAAAAAA CGATCGTTTTTATTTCCAAAGCTAAAGAAATGCCATAAATCTTTTTAAATATTATAACAAACAGAGTTAAATTTTA TTGAAAAACTACGATTAGAGCCTTTTAAATTTGGCTTTAGATTTTTATGCGCTCAAAAACCCCAACATGCTTTAAAAA TTAAAGGCTTTTAAAGAAATCTTTGATTCTAACGAGCCTTTTAAAAAAAGAACACTTGCCCTTAAAGGGCGGTGCGC TTCAAAGCTTGGTTACGACCAACCAAAAAATCGGGAAATTTTAAACCGCATGCTTAGATTAGTCATCGCTAACCCCTA AAAAAAGCCTT	2652	TFRIEKGHIHKRPKELVFSVHLTDDLK RRDFSMAIAYSPTKGLIDPFKGQNAIE NQMIECVGEARLFFEDALRILSLRFS ATLGFKIAPNTKEAVFACKDLLKHSKE RLQSELNKLIMGKNAYEVAKEYQEILE LVIQEKIENLGLKNAPFNLELRLGFFK HQKSLSLRYPKKTIVLFSKAKECHKSF LNIHNKTELKFLKNYDLEPFNLALDFY ALKNPKHALKIKGLLKEIFDSNEPFKE HLALKGGALQSLGYQHQKIGEILNACL DLVIANPKNNA

HP0005	2653	CCAGCAGAGATTGCAATCAGCTTTAGAAATTTTAAAGAAATACGAAGATGAAGCCATTACGGCGCTTAAAGAGAGC TTTTAAATCCCTAATTTACGCCAAACGCTTTAGAAAAAGTCAAAACCCCAATGTTAGCCGACATTTTACAAAAAGA AAGCGATTTTGACTATTGGCTAAATTGACTTTAAAGCAAGAGCTTTTGTCTAACACCCCTTTAGCTAACGCGACCTTA GGCACTAAAGAGAGCATTCAAAAAATCAAGCTAGACGATTGAACACGCAATTTGCTAAGGCTTTTGAACCTCAATAAG CTCGTGGTGGTCTTGGGGCGGATTGAAAATCGATCAAAACCCCTTAAGCGTTTGAATAACGCCCTTAATTTCTTGCC ACAAAGGTAAAGCGTATGAAGAGCCTTATTTGAAACGAGCGGATAAAAAAGCGAAAAAGTCTCTATAAAGACACTGA GCAGGCTTTCGTGATTTTGGTGGCCCTTTAAATCAAGGATTTAAACACGAGATTAGCGAAATCTAAAGTCATGAT GTTGTGCTTGGTGGGGGTTGGCTCTCGTTTAAATGAAAAAATCAGGGTTCAAGAGGGATTAGCTTATAGCGTGT ATATCCGCTCCAATTTCTAAAGTGGCGCATTTTGGAGCGGGTATTTGCAAAACCAAGCTCAGCACTCAAACCTAAAA GCGTTGCCTTAGTTAAAAAATCGTTAAGGAATTAAGAAATGAACGATCTCTAGCCGCTTGAACACCACTTACAATATTATTTATTT AGTTTTACTAGGCTGAGCCTTTAAGGAATGAACGATCTCTAGCCGCTTGAACACCACTTACAATATTATTTATTT AGGTTTGCTTTAAATTTAACCACGCTGCTCAATCAATCCAAATAATGAGTTTGAAGAAATCAATGATTTTCAAT AAAGCCACACCGAAATCAACGACTTGACTTTTGCTATTGTGAGCAATAAAAAAGGAGCAAAATGATGCCAT GGGTTTTGAAACTGGATCCGACCGGATTAGCGGTGTTTAAATTACGGCATGTGCCCTGGGTGAAAAAACGATGCCGT AAAAATTGATGAAACCCCTATTGCCAAGCCTTAGAGACAAAGCTAGAGATTTTGAATCTCTTATTAGTTTTTAGAAAAAG CCAACTACCAAAATGATAGGCATGGATCATTTTCGCTAAAGCGGATAATGAATTTGTATCTAGCCCTTCAAAAAAGCAGAAT TGC	2654	STEDQITLEFLKEYEDEAITRLKELKS PNFTQNALEKVKQTOMLAALLQKESDFD YLAKLTLKQELFANTPLANAALGTKEI QKIKLDDLKQQFAKVFIELNKLVVVLGG DLKIDQTLKRLNNALNPLPQKGAYEEP YFETSDKKSEKVLKDYKDEQAFVYFGAP FKIKDLKQDLAKSKVMIFVLGGGFGS RLMEKIRVQEGLAYSVYIRSNFSKVAH FASGYLQTKLSTQTKSVALVKIVKEFI EKGMTQQELDDAKKFILGSEPLRNETI SSRENTTNYFYGLGLPLNFNQTLNLIQ KMSLKEINDIFIKAHTEINDLTFAINVSNKK KDK VLKLDPRDLAVFNAYAHVPWVKTKMRKI DETLLPSLRDKLEILESJSFLEKANYQ MIGMDHFAKSDNELYLALQKAEL
HP0005	2655	GGGTTTTGAAACTGGATCCGACCGGATTAGCGGTGTTTAAATTACGGCATGTGCCCTGGGTGAAAAAACGATGCCGT AAAAATTGATGAAACCCCTATTGCCAAGCCTTAGAGACAAAGCTAGAGATTTTGAATCTCTTATTAGTTTTTAGAAAAAG CCAACTACCAAAATGATAGGCATGGATCATTTTCGCTAAAGCGGATAATGAATTTGTATCTAGCCCTTCAAAAAAGCAGAAT TGC	2656	VLKLDPRDLAVFNAYAHVPWVKTKMRKI DETLLPSLRDKLEILESJSFLEKANYQ MIGMDHFAKSDNELYLALQKAEL
HP0005	2657	GGAAAGAAAATCGCTTTAAGGATAGCGGCTATTTAAAGAAAAAATTAAGAGAGGCTAAAGATTTGATTGATCGCGCTAAA TTTGAGAAAAAGCCACGATTTATAAATCGGTCTGATGCTTTTAGAGTATCAATACGATTTTTTAAGGGTAAGGAATTA CGCCCTTTAAGCTATTAGATTTAGCCAAATGAGTTTAAACCACTCTGAAGCACGATTTCAAGGGCCATTTCTAATAAAT ATTTGGCATGCGAAAGGGGTTTCCCATTAAGCATTTCTTAGCATCGCTTAGACAATAGCGAGACTTCAAAC GCTGTGATTAAAGACTATCTTTAGAAATTGATCAAAACGAAAGACAAAAAGAGCCTTTGAGCGACGCTAAGATTTTA GAACTCATTGAAGAAAAAATCCATTTGAAATGTAAGAAAGACGATCACCAAATACCGCCAACTGCTCAACATCGCC TCCTCAAGCGAAAGGAAAGGCTCTATTTGATCGCGCTTGAAACCATGATTTAGGGCTTATTCTTATTGAGTATC ATTTGTCCTTGATGCGTGTGAGTTCAAACCTTTGGGATACCTTTGGCGAGTTGGTATAAGCT	2658	EEENRFKDSGYLKEKLEAKDLIDALNL RKATYKIGMLMLEYQYDFFKGKELRPL KLLDLANEFNHVSVTISRANSNKYLACE RGVFPKIHFFSIALDNSSETSNVAVIKDYLL ELIKNEDKKEPLSDAKIELIEEKFHLKM VRRITIKYRQLLNIASSSERKRLYLMRA
HP0005	2659	GTTTGGAAAAACCTGATTTGAAGGAGTTGGAGGAATACTACCATAAAAAACAAGGTGCTTATTGGACAAAAAGAGGGG AAATTGCAGGATTTTAAAGCGTTCAAGAGCAAGTCAAGCATGATTTAAGCATGCAAAAAAGCGAATGAAAAAGCCCTTA AGGAGCTATATCGCTCTAAAAAAGCGAAGCGGCAAACTACACCACACAAGATTTTGAAGAGAACAACTCCCCCTA TACTGCTGAAATCACGCAAAACCTCACCGCTCTCAAACCCCTTGAATCTCTAAAGCCAGAGCCTTTTAAAGATGGTTT TATTGTGGTGCAACTCATCTCTCAAAATTAAGAGCGAATTGCAAAATTTTAAATGAAGCTAAAAAGCGCTCTTAAAAACCCG CCTAACTCAAGAAAAACCCCTTATGGCGTTGCAAACTTAGCCAAAGAAAGCTTAAAGGATTTTAAAGGCAAAAGCGGT GGGCTATGTAAGCCCTAATTTTGAGGCACTATTAGTGAGCTTAACCAAGAAAGAGTCTAAGTTTATCAACGCTCT TTTTAACGCCAGGAAAAAGGGTTTATCGCTATTATAATAAAGTGGTCTCTATCAAAATCACAGAAACAAAAATTC AACCACTCATTTAGTGCAAGAAAGCCAGTATATGCAGCGTTTAGTCAATAACACTAAAAACGGATTTTT	2660	LEKPDLKEEYYHKNKVSYLDKEGKL QDFKSVQEQVKHDLQSMQKANEKALRS YIALKKANAQNYTTQD FEENNSPYTAEI TQKLTALKPLEILKPEPFKDGFIWVQLIS QIKDELQNFNEAKSALKTRLTQEKTLM ALQTLAKEKLDKFKGKSVGYVSPNFG GTISELNQEEESAKFINALFNRQEKKGFI AINNKVLYQITEQNFNFHFSFAEESQY MORLVNNTKTDFE
HP0005	2661	CTTTTCTAACGCCAAAGACAAAGAGTGCAGTGGAATCGCGCTTAATTGGGCTGAAGCAGAGATAAACTATCAA AATTTTAATAACGCTAAATACCTCATTGATAAGGTGGTCCATCCAAACCTGATTATATTCTACGCATAGCGAATCAG CCCTAGACTTGCTCAAGTTATTGAAAAAACCAGATGAATGCAAGCGGATGAGATCGCTCACTTGCTCCTCAATC AAGATGATGATCTGAAAGCTAAAGAGCAAGCGCTTTATGATTTAGGAGCGTTGATGCAAGGATCAAGGACTTTAAAA ACGCCACCTTTACAATCTGCAATATTTCAGAGCACCATCGGAACTGGATAAGCTTCTGTCTTAGGGCGCGCGAT GAAAAAGCCCTTTTCCATGGAGGGGAACACGCAAGAAAAAATCGCCCACTATGACAAAAATCATTCAAAAATTTCCCT AATTCTAATGAAGCCCTAAAGGCTTTAGAAATTGAAAGCCCAACTATTGTTGAAAAACAAGCGTTATGCTGAAGTGTTA AGCATGCAAAAAAATTTGCCTAAAGATTTCCCTTTGATCCAAAAACGCTCAATGTCTTGTCTAAACCCCATTAGAG AACCATCGTTGTGAAGAGCCTTAAAAATTTATCCCAATACAAACCTTTGAATTCAGCCCCCAAGAAAGAAATCCAA GCCTTTGATTGCTTGATTTTCGATCGCTCAAGAAAAAGCGCAATCATTCGCCCTAAACGCTTTTAAAAACGGCTAAA GCCCTAGCGAGAAATTAATATGGCTTTATCGTTTGGGGCGCAATTACTACCGCTTAGGGGATTTTAAAAAATTC	2662	FSSNAOKESASEIALN'WAEAEINYQNF NNAKYLIDKVVQSNPDYISTHSESALDL LKLLKKNQMNASAEIAHLLNQDDDLK AKEQALYDLGALYARIKDFKNAHLYNL QYLODHAELDKASVVRARDEKALFSM EGNTQEKIAHYDKIQNFPNSNEALKAL ELKAQLLFENKRYAEVLSMQKNLPKDS PLIQKTLNVLAKTPLENHRCEEAALKYLS QITTFEFSPEEIQAFDCLYFASLKEKA QIIALNAFKTAKAPSEKLIWL'YRLGRNY YRLGDFKNS

HP0005	2663	GGCTAAAGGGTGGAGCGTTCAGTCGTTCTCTAATGTGGTTTCAGAAATTGAAAAAATATGTGGATAAAATCAG CAATTCGATCATGACTAAAGCGATTGAAGGCTTGCTCTCTAATTTGACGCGCATTACGCGTATTTGAATGAAAA GAAGTTAAGGAATTTCAAGCCCAACGAGGCGGAATTTGGGGCTTGGGATCACGGTGGCGATCGCGGATGG CGTTTAAACCGTTATGCCCCCTTAGAAGGCACCTCCAGCTTACAGGCTGGGTTAAGTCAGCGGATAACATTTAAA AATCAATAACGAAAGCAGCTGAGCATGAGCATGATGCGATCAACCTCATGCGCGGCAAGCCAAACCCCTA TTCAGATCACCGTTGTAAGAAAAACGAGCCAAACCTTTAGTGTAAACATCATTAGAGACATCATTAACCTCCCT CTGTCTATGTGAAAAAGATTAAAGAAACCCCTTATCTGTATGTGAGAGTGAAGTGTGACAAAGATGTTACCAAAT CGGTTTGAAGGCTTAAAGCTAACCCCTAAGGCTAAGGGATCGTGTGGATTAAAGGGCAATCCTGGAGGGCT ATTAAACCAAGCGGTGGCTTGCTAACCTCTTCAATTAAGAGGGGT	2664	AKRVEAFSRFSNVVSEIEKKYVDKISIS EIMTKAIEGLLSNLDASHAYLNEKFKKE FQAQTEGEFGGLGTVGMRDGVLTVIA PLEGTPAYKAGVKSGDNILKINNESTLS MSIDDAINLMRGKPKTPIQITVVRKNEP KPLVFNIRDIKLPVVVYKIKETPYLYV RVSGFDKNVTKSVLEGLKANPKAKGIN LDLRGNPGGLLNQAVGLSNLFIKEG
HP0005	2665	TCATGAAAGCCTATACCGCATTGCTAAAAAAACAAGACCGATACGCTCTATTATTGAGGTATCTCCCCCTCTAGGTATT G	2666	MKAYTALLKKQDRYVYLLRYLPSRY
HP0005	2667	CTAAAAACAGCGCCATTGAAGTTTCCAAACACGAAAGCTTCTGCTATGAAGAACGAAACGATTGGAAGCGGCGATCTT AAAAAGGTGTGTGAGAAATCAAAAGCGCACTACCTTTGGGATCATCTCAGCCTTTAAACCTTTAAAGACGCTTTT TACAGAGATTTCAATCATATGAGCAAAAGTTACTGATAGGGCAGCTAAAGCGGTGCAATTCATCTAGCGCTGAT AACTGGCTCAGTTAAACGCGCTTACTCTACTGGCAAGACAAATCTGTTAAAGTGGAATGGGATAAACCCATTTTA ATCAAGGACTTCTTTAAAGGCAATAATTACCTTTATAGGAGGTTTGTGTTTATGGGAAGCATTTTATGGACAGAT TTTTAAAGAATAACGTAAGCGGCGGTGAAAGACTTTATGCTAGTAAGGAGTTTGTGCTAAATACCGATACACCC CAAAGCAAAATACAGAAAGAGCGGAAAGCTGCAATCGTATTTAGAGAATAAGCGGATTTTATAGGTTTGTTCAGG CGCTTAACCTTTTAAAGACAAACCGCAAGATCCTTTTACCCAATGAAGAAACGAGCTTTTGGTTCGCTAATG AGCCTACTATCGTGTGTTAATTTAAGGGATTATTATTGGTGTAGCGCAATCTTTAACCAACAAAGCGATCTGTTATTG TGAAAGCAA	2668	KNSAIEVSNTKASAMKNETIGSGDLKK VCEKISALPFGIISAFKPKDAFYRDF NHNEQKLLIGAAGSGCQSSADKLAQL KTRLLYWQDKSVKVDWDKPIKIDFFK GNLYYRRCFELLGKHFMDFLKNNA KASVKDFMSSKEFVAKYRYTPKQNT RAKKLSYLENKRDFIGFVQALNSLKD NPQDPFLPNEETSFLVFANEPTIVFNLR DYLLVLAQIFNQQAICYCES
HP0247	2669	GCAATTACAATTGCATTTATTGCGAGTTGGTAAAGCCCAAGCCCATTTGAACGCATGGAAGAGTGATCAAAAGTGAA ACCTTGATTAAAGCCATTCAAAACGCCCTAAACAACCTCACCCACCCCATTTGATGTTTAAACCATACCGCTAATGGC GAACCCACGCTATACCTCATTTATTAGAGCTTATCCAAAGCATCAAGCCTTTTAAAGGCGGTTAAACCTTGATTT TAAGCAATGGCTCGCTCTTTATGAGCCAAAGTCCAGCAAGCCTTAAAGGAATTTGACATCGTTAAATTTCTTTAG ACGCTATTGATTGAAAGCCTTTGAAAGAGTGGATAAACCTTATCTAAAGACATTAATAAGATTTAGAGGGGATTT GCGCTTTCTCAATTTATCAAGGGCAATTGGTGGCTGAAGTGTGTTAATTAAGGCGGTGAATGATAGCGCGAAACA ACTTAAACTCATCGCTGCTTTTAAACCAATCAATATAGCCAGAGTGAATTAAGCAGCATAGACAGAQC	2670	NYNCIYCELGKAKPIERMEEVIVETLIN AIQNALNLTTPIDVLTITANGEPTLYPH LLELIQSIKPFKGVKTILSNGSLFYEP KVQQAQKEFDIVKFSLDALDKAFERVD KPYSKDINKILEGILRFSQIYQGQLVAEV LLIKGVNDSANNLKLAFLKQINIARVD LSTIDR
HP0247	2671	ATGAGCATGAGAGGCGGAGCGATCATGCGCTTTTAGACACCCCAAGCACCCAAAGAGAGCATTTGTTTCACGCG CACTAAAAAAGAGCGGATGAATTGCACCAATTCCTTGCTTCTAAATAACAAAGCACCCCTTGCTGCGATGGGATAT GGATCAAGGGATCGGCGCTCTCTATCATGCGGTTAAAGCCATGTGTTAATTAACCACTGAGAGCTATATC CGAGTCGTGGCTAGATATAGCGGTGTAAGCCATGTGTTAATTAACCACTGAGAGCTGAGAGCTATATC CATCGCATCGGAGAACCGGGAGCGGCAAAAAGGCGATGCGGATCACTTAGTAACCCCTTAGAATACAAAG AGCTTTTACGCATGCAAAAAGAAATTGATTCAGAGATTGAACCTTTTGAATCCCAACCAATTAACGAAATCAGATCAT CAAAACCTTGATGACGCTAAAGTGTCTGAAGGGATCATCAGCCTTTATGAACAGCTTACCGAAATTTTGGAGCGGTC TCAATTGGTTTTAAACCTTTGAGTTTGC	2672	EHERAEAIMRLDTPAPKKSIVFTRTKK EADLHQFLASKNYKSTALHGDMDQR DRRSSIMAFKKNADVLVATDVASRGL DISGVSHVFNHPLNNTESYIHRIGRTG RAGKKGMATLVTPLEYKELLRMQKEI DSEIELFEIPTINENQIIKTLHDAKVSEGII SLYEQLTEIFEPSQLVLKLLSL

HP0247	2673	CAAAGGCTTACTACCTAAGCTTAAAGCAACAGCAGGGAGAAACAATAACGGCGCATCACCGCCGACAAAGAGAGAGGGGCTAAAAAACTCTATCGCATATTGATTTCAAGCGCAATAATAACAATATTGAAGGAAAGTGGCTGCGATTGAGTATGATCCTTACAGAAATGCGCGCATCGCTCTGTAGTCTATCTGATGGGACAAACGCTATATTTACAGCCAAAGCGTTTGAAGTGGCGATAGCGTTATCGCTGCTGAAGCGGTTTGATATTAAAGTGGCTTTCGCGATGAAGTTAAAAATATCCCATAGGACGGTGGTGACATAATTGAAATGCATCCAGGGCTGGCGGCAATTAGCCAGAAGCGCAGGAATGAGCGCTCAATCATGGGTAGAGAAATAATACACCATATTAGGATGCCAAGCTCTGAAATGCGCTACATTTAAGCGCAACAGAGGATCCGCCACAACCTCGTGGTAGGGAATGAGGATTTTCAATGCTCTATCGGTAAGGCAAGGGGTAGGGTAAAAACAGGACAGCGGTATCTGATCGCTTGGGCACTCCAGCTAAGGGCTATAAAACGAGAAAGAAAAAGCTAGCGACAAAGCTCATCTTCCAGAAAGAAACATAATAAGGTTAAAGAATGTCT	2674	KGLLTKLKATAGRNNGRITSRHKERGAKKLYRIIDFKRNKYNIEGKVAIEYDPYRNARIALVVPDGDKRYILQPSGLKVGDSVIAAEGGLDIKVGFAAMKLNIPGTVVHNIEHPGAGGQLARSAGMSAQIMGRENKYYTIIRMPSSSEMR'YILSECMASVGWGNEDFINVSIGKAGRNHRHRGPQTRGSAMNPVDHPHGGGEGKTGTSGHPVSPWGTPAKGYKTRKKASDKLIISRK KHK
HP0247	2675	GCAAAAAAGACGCTTGGGGTTCATCTATGAGATCAGCGAGTTCATGAAAGCCTATACCGCATTGCTAAAAACAA GACCGATACGTCATTTATTGAGGTATCTCCCTCTAGGTATTGGCCAGCATTTTAAACGACTGCCCTTTATGTCAAA TACCTGATTTGACGCTTTGAAAAAGCTTTTGGTGCTTATTATACCAACTTGGATTGCAGGAGCACGATCACG CGCATCAAGCAACACGATCAACATTATCAAAACGTTAAAGCAATAAGAGCGTTGAAACCATCAAGAGAGCTTATA TTGAATAGCATCGACTCTTATAACACCTTTGATCAATACCTCTATACTTATGGGATAGCTCTTCTGTTTATCATAGCA AATGGTGCGTCTGCTTAGCCCTAGCTAATTTATCATGGCAGATGAAGAGAAACCCCATTTTATCGCTATGGATG CCGAAACCCAAAGTGAGCATATTTGCCACAACCGCCCAAGAGGAGCGAGTCAATGGAACGCGGATTTTGACAAAGA AAAAAGAGAAGAAATGGTAAATAATATCGCGAATTTAACCTTTTAAAGCGTAAAGAAACGCGCATGCTTTAAACGG GGATTTTGATGAAAAAAGAAAAATTTATGGAGGCAAGACACGAGCAAGTAGCTGTTATGACATCACATAAGA ATTGATAGCAATTATAGGAAGTGA	2676	KKDACGFIYEISEFMKAYTALLKKQDRYVYLLRYLPSRYWASILTTALYVKYPDFD ALKLLVSYYYQTWIAAGGTITRIKQTSIN IKNVKSNSKSVETIKELI.NSIDSYNTFDQ YLYNLWDSSSVYHSKVVWVPLALANY FMADEEKPHFIAMDAETQVEHILPQTP KRGSQWNADFDEKEKEEWWNNIANLT LLKRKNNAHALNGDFDEKRIYGGKDT SKVISCYDITKELYSNYRKW
HP0247	2677	TGACACCAAGCGCTAGAGGCTTTGGGGTTAATGCGGGCTTTTATCCCAATGCCAACGCTTTAAAAAAATGA ATAAGAAAGAAAGTGAAGAGACTTGTCAAAGATTGATGTGAATACCAGTTCATCCCATCATTTAAAAACATGC TCATAGAAAGCGAGCGTGCCGCAAGAAATTTTATTTTAGCCATGGCGAGTCTAAATTTTCATCAAGGGCTTATAGCA GGAAAAAGCGGTAGGATTTGGCAATTCATGCCAAGCACGGCTAAAGAAATTAGGGCTTAAGGTCAATCATTACATT GATGAAAGAGAGATCCCATTAAGCACTCAAGCGGATCACTTATTGAAACGGCTCTACAAGCAACCCGGAGA GTGGTATTTGGTCTATGGCTATAATTACGGCTTACGCAAGGTTCAAACGCTATTAAAGCCCGGCACTTCGG ACATTAAATTTTGTGGATGAAGATAAGAAATACCTCCCTAAAGAAACACGAGAGATATCCGCTCCATTCTAAGCC TAGCGTTAAATTCACAGCCTAGACAACTCAAGATAAAGAAATATCTGCTCAATCGTGGGCGAGGTGAGTTTA GTGGCGTCCGTTTAAAGCGTGCTTCTTTAGTCCAAGTAGCCAAATTTGAAATTTGAGTTTGAAACCTTAAAA TCCTACAACCACTCAATTCGGTTAATACATTCTGCTTCTAAAGACCCCACTTATACCATTTATATCCCTTATGAAAC TCGCTCTTTTCAACAACCGCAGATCAAAACAAATAAAACATTCAAGCCAGTTCAAAAAGCCCTTTTATCACCCATGT GGTCTTACCTAAAGAAACCCCTATCTTCTATCGCTAAACGCTATCAAGTCAGTATTTCCAAATATCCAATTAGCCCAATGAT CTCAAAGATTCTAATATTTTATCCACCGGTTTATCATCCCCACCAACAAAAAATTACTCGCTACAAAGGGAATTTT AATGGGTTTG	2678	DTKALEAFGVNAGFLSQMPNALKKMN KEEEWKRLVKRFDVNYQFIPIKNMLIE ASVPQEFLFLAMAESEKISSRAYSRRKA VGIWQFMPSTAKELGLKVNHYIDERRD PIKSTQAATYLRLYKQGTGEWYL VAM AYNYGLRKVQNAIKAAGTSDIKILLDED KKYLPKETREYIRSILSLALKFNSLDNLK DKEYLLNRGARVSLVGVPPFKRRASLV QVAKNLNLSLETLSYNHQFRYNIPLS KOPTYTIYPYEKLALFKQRQIKQKNKIQ ASSKSPFITHVVLPKETLSSIAKRYQVSI SNIQLANDLKDSENIHICRIIPTNKKLLA TREF
HP1411	2679	TTAAAAAATCCGCTCCCTGAAAGCAGCGGCATAGGGGTAAACCCATCAGTAAAGAGGCACAGAGGCTAGT GAGAAAGCGGATTGAATACGCAATTGATAACGACAGCCAGCGTGACTTTTGTGCATAAAGGTAACATCATGAAT ACACCGAAGGGCGTTTCAATGAAATGGGGCTATGCGCTCGCTCAAAAAGAAATTTAACGCTCAAGTCAATTGATAAAGGC CCATGGTGTCTTTGAAAAACCCCTAAAAACGGTAAAGAAATCATCATTAAGACATGATCGCTGACGCGTTTGTGCAA CAAATCTTATTGCGCCCTAGCGGAATACAGCGTCAATTCGACCATGAATTTGAACGGGATATATCTCTGATGCGTTA GCGGCGATGGTGGGGGTATTGGTATCGCTCGCTCGCTCAATCTCAATGA	2680	KKIRFESSGIGVKPISKEGTERLVRKAI EYAIENDKPSVTFVHKGNIMKYTEGAF MKWGYALAQKEFNAQVIDKGPWCSLK NPKNGKEIIKIDMIADAFLOQILLRPSEY SVIATMNLNGDYISDALAAMVGGIGIAP GANLN

HP1411	2681	GCAAAAAGAGCCCTAGCACTCATTATTGTAGATGAAGAAGTTCTTTGGAAGTTTGAAGAGCTTAAAAACATTCC TGCGTGCTTAAGCGTTTCATTATGTGTTATTTAAGGTAGTTGGATGCGAGATTTTAAAACTTTTAAAAAAGCATGAT GAATTAATAATCATTGACACCCCTTGAAGTGGATTAGAAATCGCTCATCTAGCCTATATAGAAGCGAAAAAACCT AATGGGGCAAGGCCCTTTATTACGCAACCCA	2682	QKEALALIVDEEVSLEVLKKNIPACL SVHYVWI
HP1411	2683	GCGATCTTAAAAAGGTGTGAGAAAATCAAAAGCGCACTACCTTTGGGATCATCTCAGCCTTTAAACCCCTTTAAAG ACGCTTTTACAGAGATTTCATCATAATGAGCAAAAGTTACTGATAGGGCAGCTAAAAGCGGTTCATTCAATCTA GCGCTGATAAAGTGGCTCAGTTAAACCGCTTACTCTACTGGCAAGACAAATCTGTTAAAGTGGATTGGGATAAA CCCATTTTAAATCAAGGACTTCTTTAAAGGCAATAATTACCTTTATAGGAGTTTGTGTTTATTGGGAAGCATTTTAT GGACAGATTTTAAAGATAACGCTAAGCGGAGCGTGAAAGACTTTATGTCTAGTAAGGAGTTTGTGCGCTAAATACC GATACACCCCAAGCAAAATACAGAAAGAGCGAAAGCTGCAATCGTATTAGAGATAAGCGCGATTATATAGGG TTTGTTCAAGCGCTTAACTCTTTAAAGAGACAAACCGCAAGATCCTTTTACCCCAATGAAGAACGAGCTTTTGGTGT TCGCTAATGAGCCTACTATCGTGTTTAAATTAAGGATTATTTATGTTAGCGCAATCTTTAACCAACAAGCGAT CTGTTATTGTGAAGCAAAATGCCCTATAGAAATTGATCAACGCTTACCGGGTAAGGACTTTAACAGACACACAAGACA GCTTCCAGACATCAAAATCTCAACACCCCAATCAGTTAGAACATCCCTCAACGCTCTTAAAAACAAGCTAGCCGCAT TCCTTTCAAAACACC	2684	DLKVVCEKIKSALPFGIISAFKPFKDAFY RDFNHNEQKLLIGAASKGCIQSSADKL AQLKTRLLYWQDKSVKVDWDKPIKID FFKGNNLYRRFCCELLGKHFMDFLKN NAKASVKDFMSSKEFVAKYRYTPKQN TERAKKLQSYLENKRDFIGFVQALNSL KDNPDQPLPNEETSFLVFANEPTIVF NLRDYLVLVLAQIFNQQAICYCESKCP LINASPGKDFNKTDQSFDPDIKFSTPNQL EQSLNALKNKLAFFSKH
HP1411	2685	GCCAGAAAGCGGCTAAAAAGCGCTTAATGGAGCGTTTCACTTTGAGCGGATCAAGCAAGGCCATTTTAGAAATG CGTTTGCAACGCTTAACAGGCTTGAAGGGATAAGATCAAGAAAGATACCAAACTTGTGGAGCTTATTGATGAT CTCAATGGCATTTAAGAGCGAAGATCGCTTGAATGGAGTCTCAAAACAGAGCTTTTAGAAGTCAAGAGCAATTT TCTTCTCAAGGCGCACTGAATTCAGAAATCTTATGAAATATTGACATAGAAAGATTGATCGCTAATGAGCCTATG GTAGTGAGCATGAGTTATAAGGCTATGTGAAAGAGTGGATTTAAAGCTTATGAAAGCAAAATCGTGGTGATAA GGCAAGCTTTCAGGCGACCTTATGAAGCGATTTCATTGAAACCTTTTGTGGCTAACACGCGATGATTTTGTCTC TTTATCACCATAAGGGCAATTGTATCATTTGAAAGTCTATAAATCCAGAGCGAGCGGATCGCTATGGGTAA GCCATTGTAAATTAATCTCGCTCGCTCCGATGAAAGATCATGGCGACTTAAGCACCACAAAGACTTTAGCGGATGA ACGCTCTTTGGCCTTCTCACGAAATATGGCGTGGTGAAGCGCACCAATTTGAGCGAATTTGAAAGCAACAGGAGTT GTGGTATCAGAGCGATTGTTTATAGATGAAGCGGATGAATAGTGAGCGCAAAAGTTGTGGATAAAACCGCTAAGCAT TTGCTCATCGCATCGCATTTGGCATTTTCAATTAATCCCTTTAGAAAGGTGCGGAGATCGGAAGAATACTACTCGT GGGGTTATAGGCATCAAGCTGAATGAAACGATTGTTGTGCGTGGCTATTATTAGCGGATGATGGCAACAAGCT TTTGAGCGTGAGTGAAACGGCTTGCGAAGCAAACTTTAGCGGAAGCGGTATAGA	2686	PEAKNALMERFTLSEIQSKAILEMRLQ RLTGLERDKIEEYQNLLELIDDLNGILK SEDRNGVWKTELELVKEQFSSPRTE IQESYENIDIEDLIANEPMVMSYKGY VKRVDLKAYEKQNRGGGKGLSGSTYE DDFIENFFVANTHDILLFITNKGQLYHLK VYKIPEASRIAMGKAIVNLISLAPDEKIM ATLSTKDFSDERSLAFFTKNGVWKRTN LSEFESNRSRGIRAIIVLDEGDELVSAY VDKNAKHLIASHLGIFIKFPLEEVREIG RTTRGVIGIKLNENDFWGAVVISDDGN KLLSVSENGLGKQTLAEAYR
HP1411	2687	CTACCTTAAGGCTTCTATTTCGTTAGAAATTGAGTAATGAAAAGCTTTTGAATGAAGTCAAGGTTAAAGACACAGCGAT TAAAGACACGATTATAGAGATTCTGCTGCTAAAGCGTGGAAAGTGGTTACTAACAAAGCGCAAAACAAAGCTTAA AGATGAGATTAAAGAGCATTTGAATTCGTTTGTGATGGCTTTATTAATAATGCTTTTCACTGATTTTCATTATCC AATAATTTAAATGATTGGCATAGATATTGCTCTATTGCTAGGATAGAAAGTGGTGAAGCGCTTAAATGAAGTT TTTAGAGCGTTTATTATCGCAAGCGGAGATTGTTTATGCAAGGATAAATCCAGCAGTATCGCCGGTTTTCGCGCT TAAAGAGCGTTGTTCTAAAGCGCTTCAAGTGGCATTTGTAAGGAAATGAGCTTTTGGATATAAAATCTCTAAAG CCCTAAACCGCCCTTAAATCACCTTTCACAAAGAAATGGAATTTCAATATCCAAAGCTTGAAGCGCGAGCAT CAGCCATGACGCTGTTTGGCATAGCGGTGTTTAAACGCAAAACCTTTTCAATGAATAAATACGCATTCTAAACATAA CATTCGTTTAAAGAGCGCTTAACGGCTTTTAAACGCAAAACCTTTTCAATGGTTTGTGATAACAAATTCG AAATAAATAAATCAAACTTCAAAATTAAGTTAATTTAATAATTTTATAGTATGATCGGTTTGAATTAATGAG AAAGGTTATCACAATGAATGGTTATTGAGAGTAAACCTCTTATTTTAGCGTTGAAGCGCTTGAATTTTGTCTT TTAACTCTTTGGTGGCGGAAAGACATCACACTTTGCAAAAGTGACAACTGAGCAAAATTCATCCA AGCGCGCGCTTTCATGGCAAGCGAAGAGATGCGTAATTCACAAGCTCTCGCAGCGGTGATTTCCACAAGGAAC TCAA	2688	YLKASISLELSNEKLLNEVKVKDTAIDT IIEILSSKSVVEEVTNKGKNKLKDEIKSH LNSFLIDGFIKNVFFTDIIQ

HP1411	2689	GAGTAAATCTAAGGGCAATGTGGTCTTTGGACAAGCTGCTCAAAACGGCATGGGAGCGATGTGGTGGCTTTGTGGGTAGCGGTTTAAATGACTATCAAAACGATTTGAGAGTCTCTCAAACCTTTTCACTCAAAACAGAACCAATTATAAAATTCGGCAACACCCCTGAAATCTTACTCGCTAATTTAGCGATATGGATCTCAAGAAATTTAGAACGCCCCCATAACTTCAAGCCCTTTAGATCATTTATGTAGAGACTTTAGAAACCATAGCGCTGGAGTCAATAGCGGCTTTGAAGAGCATGATTGTGAAGGGCTTGAATATTTAATGGCGTTTGTACCAATGAATGAGCGGGATTTATTAGACGCTTGAAGGATAGCTTGTATTGCGATAGCAAAACAATGAAACGCCAAGCCATTCAAATGGTTTACTCGCTACAGCTAGTAAGTTGTGCTACTTTTAGCCCGATTTAACGCACACGATTGAAGAAGTTTAGAGCATAGCCAAAGCGCTTCGCATTTTACAAAGCCAAAGATGTGTTGATTTAAAGACATTAGCGTTTCAGAAAACTCCACCTCAAAGAGTTTAAAAAACCCAGAAAATTTGAAGCCGTTTAGCCCTTGCCTTGAATGAAGAGTTAGACCGATTGAAAA	2690	SKSKGNVVSCLKLLKTHGSDWRLWVAFNDYQNDLRVSQTFITQEQHYKKFIRNTLKFLLANFSDMDLKNLERPHNFSPLDHFMLETLETISAGVNSAFEEDHFKVGLNILMAFVTNELSGIYLDACKDSLYCD SKNNEKRAIQMWLLATASKLCYFLAPI LTHTIEEVLEHSQALRIFIQAKDVFDLKDISVSEKHLHKEFKPENFEAVLALRSA FNEELDRLK
HP1411	2691	CGAAAAAGGATTTTCATGCTGCTTTGCGCTGGAAGGAATGAGACTTTAAAAAGCGGTGCTTATTGGTGTGGGTTTGATAGAGAGCGGATTAATCTAACGAGAAATGTGTTAAAAACCCCTGATACAGAAAGCCTTATTTTATAGGGAGCGCGGGAGTTATAGCCCAAGAAATGGAGCTTTTAAAGCGTTTGAAGCGTTTGGGCTATCAAAATGAAGAGAGTTTTAGCCATTTAAACAGCTACACGCTTTGGATAATTTCAATCACATAGAAACTGAAGAGCAGGCTCTTTTGAAGGGTGCGTGTGAATAGCAGTAATCCACACCGGAAATGTTGCTAAAAAATGGTTCAAAGGGCGTTTTATTAGAAACATGGAGTTTTAGCGTTTTAAGCGTGTGCTAAAGCGTTTTCTTAAAGGCTAAAGGATTTTTGCGTGAGTAATATGTGGGCTTAATCGGTATCAGGAATTTAAAGAAACCCAGCAAGTCAACAGATTTTAGAAAACATCATTTAGATA GTTTAATAATTAATAGTTAGCTATCATGGAGCATCTAAATTAAGGCGATCACATGTTTGAAAAATACGCAAGATTTAGCGGATATTGAAGATTGCGAAATGAAATGAAATGCTTTTAAATTAGCGAATTTGAGTTGGGGATTTTATTGAGATTAAGAGGGAGCATGGACATGCCAAAGGCGTGAATGAAGCGTTTTTACGCAATTAAGCGAAGAGTGGAGCGATTGAAGGAGCTTATAACGCTTTGAATAAATCAAAAAGGGTTATTGGTGTTTTAAATGTGTGGGATTGTAG GTTATATAGGGGATAGCGAGAAAAATCCGTTCTTTAGAGGGATTAAAGGAATTGGAATACAGAGGTTATGACAGCGCGGGTTAGCCGTTAGTAATGATCGTTTGAAGTGTTTAAAACTCAAGGGAATTAGAAAACTTAAACTAGAGCTTAAAAATAAA	2692	EKRFIMLLCAGRNETLKAVPIGVGLIESAINLTRMCLKNPDTESLIFIGSAGSYSPEMELLSVFESVCGYQIEESFSLNSYTPLDNFIHETEEQALFERVRVNSSNYIHTSEMFAKIMVQKGVLEENMEFFSVLSVAKAFSLKAKGIFCVSNVYVGLNAYQEFKENHAKVKQILENIIDSII
HP0482	2693	GAGGTGAAGTGTAGAAATGTGGCTTTGATCGCTTATTTGAATAGCTGGGTAAATCCAGGATCAACGCCAATCAAAACGCTAAATAAGGGTGAATGATGATTTAGAAAGTTTGAAGGTTTTGCGTATGCGTTTTTACCATTCTTTTACGCTCTTTTGTATGCCCTATATTTAGCATGTATAGAAAGCAAAAAGGCATTATGGATTATAGCGATACGGTACTTAGCGTTAAATGATGCTTTAGAAGACGAGTTGATTGAACACGCCATAAAAAGTTTCATGATAATGGCATAAAGGAAAGTTGAAATGGATTTTTAAACGACCATATAATGTTTTGGCTTGATTGCGCGCTTGTGATTTTAGTTTAAACCATCTATGAATCCAGTTCGCTCATTAAGAAATGCGCGACAGCAAAATCTCAAGGTGAGCTTGTAGAAAAATGCGAAGTCAAACTGCCCTTAAAATCGCTGATGTAGAAATACGTGAAAGACAGCACAAAGTTAAATTTCAACTATCTTAAGGATTTAAAGATGAAACAAATCAACCTTTATCTCAAAATATTTAACTCAAAATGTGGCTAGAGTGTATTTAATTGTA GTGAATGGTGAGATTAAAAAATCGGTGCTCTCAAGCAGATGGTGGGATTAAGACACGCTCAATATTTATAAAGATGGGGAGTCAAAGGGAGCCATAATAGAAAGTTTGGCGTGTGTTTCTTTATCACACAATACTCACAGGGCTTAAATAGAAATTTACATGATTTATCAGCCTAAATTTGAAACTCAAGTGAAGGCTTGTGGTTTTGTGCAATCAAA GATGCAAGTATAAGCTATAACTTTTAGAGCAAGCTTGCTGACGGATTACAGAAACAATAGCAATGACGCATTACCCGAATGGAATGTGCAAGAGCAGGGCAAGATTAGCCAAATGATATTAAAGATGAGCATGCCAATATCACTCAAAAAGCTCAAACAGAGAAAAGCCGCTCCATAGAAAAGCGATTGACAAACCTAGCGGAACTTTAAAGATTAAGAGATAGTCTTAACCCAATCTCAAAAAGAACTTTAAGTTTTACTCCATTTAAAAAGTGTGGTTTAGATGAAGGAAAAATAAACTTGATAGGTAGCAGATATTTTGTGGTCTGGAGGATTGAGCTATGGCTTTCTATGACCCCTTATTTGAATTGATATGGGCTAACGATATAGACAAGGACGCCATTTAAGCTATCAAGCCCAATCAAAAGAGGTGTAACCCATTTATGCGATTTGTGCAACTTCATTGCCCAACTTGCCATGCGTTTCAATTGATATTCTACTAGCGGGACCACCATGCCAGAGCTATTCTACCCCTTGCCAAAAGAAAATGGATGAAAAAGCGAATCTGTTTAAAGAA	2694	GEVLEIVALIAYLNSLGNIRINANQNAK
HP0482	2695	GCGAAGTCAAACTGCCCTTAAAATCGCTGATGTAGAAATACGTGAAAGACAGCACAAAGTTAAATTTCAACTATCTTAAGGATTTAAAGATGAAACAAATCAACCTTTATCTCAAAATATTTAACTCAAAATGTGGCTAGAGTGTATTTAATTGTA GTGAATGGTGAGATTAAAAAATCGGTGCTCTCAAGCAGATGGTGGGATTAAGACACGCTCAATATTTATAAAGATGGGGAGTCAAAGGGAGCCATAATAGAAAGTTTGGCGTGTGTTTCTTTATCACACAATACTCACAGGGCTTAAATAGAAATTTACATGATTTATCAGCCTAAATTTGAAACTCAAGTGAAGGCTTGTGGTTTTGTGCAATCAAA GATGCAAGTATAAGCTATAACTTTTAGAGCAAGCTTGCTGACGGATTACAGAAACAATAGCAATGACGCATTACCCGAATGGAATGTGCAAGAGCAGGGCAAGATTAGCCAAATGATATTAAAGATGAGCATGCCAATATCACTCAAAAAGCTCAAACAGAGAAAAGCCGCTCCATAGAAAAGCGATTGACAAACCTAGCGGAACTTTAAAGATTAAGAGATAGTCTTAACCCAATCTCAAAAAGAACTTTAAGTTTTACTCCATTTAAAAAGTGTGGTTTAGATGAAGGAAAAATAAACTTGATAGGTAGCAGATATTTTGTGGTCTGGAGGATTGAGCTATGGCTTTCTATGACCCCTTATTTGAATTGATATGGGCTAACGATATAGACAAGGACGCCATTTAAGCTATCAAGCCCAATCAAAAGAGGTGTAACCCATTTATGCGATTTGTGCAACTTCATTGCCCAACTTGCCATGCGTTTCAATTGATATTCTACTAGCGGGACCACCATGCCAGAGCTATTCTACCCCTTGCCAAAAGAAAATGGATGAAAAAGCGAATCTGTTTAAAGAA	2696	EVKTAFKIADVEYVKDSTKLNFNLYKDLKDENNQPLSQNILTONVARVYLVWNGEIKKIGSQADGGKSTLNKYKGGVKG RPNIRSFVWYFLYHTILTGAKIEFYMIYQPNFETQVKGLFGFCAIKDASISYKLL EQACLTDYRNNSNDALPEWNVQEQGKD

HP0482	2697	AATACGCTGATCCTAGCACCTCTAAAAAGAGAGCCGATAAGGGATTAAAAAAGGTGTTCAAAGACAGCAAAAAAGAC GCTTGGGGTTTCATCTATGAGATCAGCGAGTTTCATGAAGCCCTATACCGCATTGCTAAAAAACAAGACCGATACGT CTATTTATTGAGGTATCTCCCTCTAGGTATTGGCCAGCATTTAACGACTGCCCTTTATGTCAAATACCCCTGATTTT GACGCTTTGAAAAAGCTTTTGGTGCTTATTATTACCAACTTGGATTGCAGAGGCACGATCAGCGCATCAAGCA AACAGTATCAACATTATCAAAACGTTAAAGCAATAAGAGCGTTGAACCATCAAAAGAGCTTATATTGAATAGCAT CGACTCTTATAACACCTTTGATCAATACCTCTATACCTTATGGATAGCTCTTCTGTTTATCATAGCAATGGTGCGT CCTGCTTAGCCCTAGCTAATTTATTCATGGCAGATGAAGAGAAACCCCATTTTATCGCTATGGATGCCGAAACCCAA GTGGAGCATATTTTGCACAAACGCCCAAAAGAGGCGAGTCAATGGAACGCGGATTTTGACAAAGAAAAAGAGAAGA ATGGTAAATAATATCGCGAATTTAACCTTTTAAAGCGTAAAGAACGCGCATGCTTTAAACGGGATTTTGATGA AAAAAGAAAAATTTATGGAGGCAAGACACGAGCAAGTGATTAGCTGTTATGACATCACTAAAGAAATTGTATAGCAA TTATAGGAAGTGAATGAGAAAGTCCCTCCAAGAGCGATACAAATCTTTGTATAACACTATCACGCCCTGTTTACACAT AGAGGGCAAGAGATGATTTGAAGATGATTTTGATCT	2698	YADPSTSKKRADKGLKKVFKDSKKDA CGFIYESEFMKAYTALLKKQDRYVYLL RYLPSRYWASILTALYVKYPDFDALK KLLVSYYYQTWIAAGGTTRIKQTSINIKN VKSNSVETIKELILNSIDSYNFTDQYLYMA NLWDSSSVYHSHKWVRPVLALANYFMA DEEKPHFIAMDAETQVEHILPQTPKRG SQWNADFDEKREEWVNNIANLTLLK RKKNAHALNGDFDEKRIYGGKDTSK VISCYDITKELYSNYRKWNEKSLQERY KSLYNTITPVLHIEGQEDDFEDDFD
HP0241	2699	CGAGCGTGAGCGAAGTGTTAGAATTGTGCGATGTTTAAACCCGCGCAACATTAAAGGGCGTTTGAAATTTGATCGTG CGCATGGGTTCTAAGATGATTAAGAGCGTTTGCCCTAACTTTTACAAGGGGTGTTGGAAGAAAAACGCCATATTTTA TGGAGCATTTGATCCCATGCGATGGCAACACGGTTAAACACAGCTTGGGGTTAAACAAGGGCTTTTGATAGCGTGT AGATGAAGTGAAAGCTTTTTTGAATCCATAGGGCTGAAGGGAGTTTGGCTTCAGGGGTTTCATTTGGAAATGACAG GTGAGATGTTACAGAAATGTATCGGTGGCTCGCAAGCGATCACCGAAGGGTTTGAGCTGCCATTACTACACGCA ATGCGATCCAAGATTAAACGCCCAAGCCCTAGAACTCGCCTTCTTAATCGCTGACATGCTCAAAAAACAGCAGC CTTAGTTAAAAAGAGATTAACTTTTTTAACTCTTTTACCTTATAATATCGTTGGCATTTAATATTCAAAGGAGCTTG AAATGAGAAATTTCTTTTAGCTGTAATTTTAGCGTTATTGTTGTGGCTTGCCACGAACTAAAAACAATCTTACA AAACGAGCGCGATAGCACCCCTTCAGAAAAAACCATTTGGCAACCTGAACAAAAATAAAATTTGTAATACTCAAA GGCATTTTTTAAATAAACGCAATAAAAAAGCTAGTGGGTGATAGTTTGTAAAGCGATCTTAGGGTTGTAGGGGA ATGATTTCAAAACACCCCTAACTCTTATGAAGTTTATTATAAACTAAACAAATTTAAACAACAAAGTTTTTAAAA GTGAGAGAATGGCTAAAAAATCTCAATTAATGGCGGAAGTTAGAAAGTTAAACTACAACTCTCTAAACCTTTT GAGCATGGCCCTTTCGCTTTGACATTGTAGAAACATTTTCTAAACGCCCTTGCGTGTGATAATGAAGGTGGAGCGG ATAATCCCCA	2700	SVSEVLELCDVLNPRNIKGRNLIVRM GSKMIKERLPKLLQGVLEEKRHILWSID PMHGNTVKTSLGVKTRAFDSVLDVK SFFEIHRAEGSLASGVHLEMTGENVTE CIGGSQAITEEGLSCHYTTQCDPRLNA TQALELAFLIADMLKKQHA

HP0241	2701	CGCAACAAGCGATCCAACTACAGCTAATATGCAAAACCCCTTGCGCGCTTAGCGCCCAAGACGCAATGGCGCTTCT TCTAATAATGCGTCAAAATAACGCGCAATCGCCTTGAGTAATAACGATGAAGCTTGATGGTGGCGGAATGATTT CAATTTTTCAGGCAATATTTACGCTAATGGGTGTTGATTTTCAAGATTAAAGGCTCTGCAACATTAATAACCTG TATCTTTACAATAACGCTCAATTCGAAGCCCAACATCTCACTATTTCCAATCAAGCGGTGTAGAAAACGCGCAGC TTTGTACGAATAATTTAAACATTCAAGGAGCGTTTAAACAACACGCCACGCAAAATAGAGGTGCTTCAAAATTTA GTGATCGCTTCAACGCTTCTTTAAGCACCGGATTTATGGTTAGAGTAGGGGGCTTGAATAATCTGGAGC GATCCATTTTAAATTTAGAAAATACCCAAACGCCAAGCGCTCATTAAGCAGAGGGGATCATTAACCTCAACACCCAG CCAAACGCCCTTTTATGAATGTCAATAACAGCATGGCCAAATAACGACTTACACTTTAATAAAGCAGCGCTTACATT GATTACAATATCAACCCCAACAGCTTGCAATCGTATTTGAATCTCTACACTTATCAATATCAACGCGGAACCATAG AGGAAAAAACGGCGCATTTGACTTATTTGGCCCAACGGTTTGTGCAAGATAAGGGTTATTGTTAAGCGTAGCG CTGCCCAACTCAAAACACGCTTCTCAAAACAACATTTAAGCCTTTCTGTCTTTATAACCAAGTTAAATGCTTGCG GCGATAAGCGATGATTTTACCCCGCTTACCTTACAAGATTACATTTGGGCAATCAAGGCAAGCGCGCTCAAT CAAATTGAAGCTGTTGGGGGAACGCTATCAAGTGGCTTCAACATTGATGATGGAGACTAAAGAAAAACCGCTTTT TGCGCGCGATTTA	2702	QQSDPTTANIANPCALSAQSTNGASSN NASNNAPIALSNDESIMVAANDFNFS GNIYANGVDFSKIKGSANIKNLYLYNN AQFQANLTSNQAVLEKKNASFTNNL NIQAFNNNATQKIEVLJNLVIASNASL STGIYGLEVGALNNSGAIHFNLENTQ TPTPLIAEGEINLNTTQPFMNVNNSM ANNTTYTLKSSRYIDYNINPNSLQSYL NLYTLININGNHIIEKNAGALTYLGQRVL LQDKGLLSVALPNSN ASQNNILSLS VLYNQVKMSCGDKAMDEFTPTLQDYI VGIGQSSALNQIEAVGGNAIKWLSTLM METKENPFFAPIYLYLKNHSLNEILGVTKD LQNTASLISNPNFRDNATNLELASYTQ QTSRLTKLSDFRSREGESDFSLLEKN KRFSDPNPEVFVKYSQISKHPNNLWV QGVGGASFISGGNGTLYGLNAGYDRL VKNVILGGYVAYGYSDFNIMHSLGN NVDVGMARAFUKRNE-TLSANETYG GNATSINSSNLSVLNQRYNYNTWTT SVNGNYGYDFMFKQKSVWLKP
HP0241	2703	TTTGAACAACCTTTAACGAGATACAGCACCCCTAAACACCCCTTATCAAAATGTCCGCTGATCCGAGCGCAATTAATGC GGTGGGGAATACTGGCGCGAGCACGAAGAATTTGATCGCGGATAAAGCCAACTCCCGCGCTATCAAGCCGT GTTTTAGCGATCAACGCGCGGTAGGGTTGGAATACCATCGGCTATGCGGTATGCGGGAAACGGAAACGG CACAGAGAGTGGCCTGGCAGCGTGATCTTTAATGACCAACGAGGACAGGATCCACGCAATTAATGCAACCGC TTTGAATCAACTGGCCTGGTAAAGCATGCTATTGATGAATTCAAAACCTCAATGAAGCCTATCAATCATCCAG CAAGCTTTAAAAATCAAAGTGGTTTCTGAATAGCGGGAACGGCACAAAGTGAGTGTAAATACAAATTACGAA TGAGACAAACTGCTGATATCAACGGGGTGTGTATCAGTTCTGCAAGGCTAAATGGTAGTAGCAGTAGTAA TGCGGTAATGGCAGTAGCACCAACCAACCGGACCAACCGGCTAAGGCTGAAGGATCAACCTACCTATAAT AATAACAAAGCCACCGTCAAATTTGACATCAACCAATACGCTGAACAGCTGTAAATCAAGCGCAACATCATGCAA GTCCTTAATACGCAATGCCCTTTAGTGGCTTCCACGAATAACGAAACACTCCAGGGGTGTCACCATGGGTTT AAGCACATCCGGGAATGCGTGAGCATCTTCCAAACAAAGATTTAGCCAGGTACTAGCATGATCAAAACGCGCCAAAG AATAATCGCGCAAGCAAAATCGTTAGTGAAACGCGCAAAATCAAAACAACTTGATAGTACTGGAACCACTCAACC CTTACACGGACGCCAGCTTTGCGCAAGCATGCTCAAAACGCTCAAGCGCAAGCAGAGATGTTCAATTTGAGCGA ACAAAGTGAAGAAAGAACTTGAAGTC	2704	LNNLLTRYSTLNTLIKLSADPSAINAVRE NLGASTKNLIGDKANSPAYQAVFLAINA AVGLWNTIGYAVMCGNGNGTESGPG SVIFNDQPGQDSTQITCINRFESTGPGK SMSIDEFKLNEAYQIIQJALKNQSGFP ELGGNGTKVSVNYNIECRQTADINGG VYQFCKAKNGSSSSSSNGNGSSTQTT ATTTQDQGVTTTNNNNIKATVKFDITNN AEQLNQAAANIMQVLTNTQCPLVRSTNN ENTPGGQGPWGLSTSGNACSIFQDEF SQVTSMIKNAQEIQAQSKIVSENAQNQN NLDTGKPNPYTDASFAQSMMLKNAQA QAEFMNLSEQVKKNLEVMKNNNNVNE KLAGFGKEEVMNTNFVSAFLASCKDGG TLPNAGVT
HP0241	2705	TAGCGGTAATTGAAACGAAATGCACACTTTTCCACCAACTCATTGATGGGAATACCCCTGATTATCAAAAAATCCT CCCTAAAGAATACTTCTTCTTCACTTTAGGCAAGGAAGAATTTAAAGAGAGCATTAATTTGCGAGTTCTTTAAGC TCCACCATTAACCTCACITTAGAAAAAACAACGCTTTGTTGAATCTTTGGATTCTGAGCATAGCGAAACGGCTAAA ACCTCTGTTGAGATTGAAAAAGGTTGGATATTGAAAAGCCTTTCAITTTGGCGGTGAA	2706	AVIENEMHTFTTKLIDGNYPDYQKILPK EYISSFTLGKEEFKESIKI.CSSLSTIKL TLEKNALFESLDSEHSI:TAKTSVEIEK GLDIEKAFHLGV
HP0241	2707	CGGTGGCGGATGTTTGGTGAAACGGGCTTTTAAACGCGCTAGATCCTACGGAAGAAAAAATTGATCAAATG CTTTTAGAGCAATCCAAGCCCATCTTCAGGGTTTGAAAATTCATCGTGAAACCTTTAGGGATTGAAAATGTAGAG AATTTGATCAATAACTGGTATGGCAAGCAAGCTTGAGTTCTTTTGCCAAATTTTGTGCTGGAGGCTTGAATCAA GCCCTTGATAAAATAGGCTCTAGCTCTGATGCCAAAGACTTACAGAACTTCTTGATAAAACGAGCTTTTGGGGATATT TTAAATCAAATGATTGAACAAGCCCTTTAATCAATAAATCAAT	2708	VGDVFGENGLLNALDPTERKKIDQMLL EQIAHSSGFEKFIVKTLGIENVENFIN NWYKGQSLSSFANNFVPGGLNQALDK IGSSSDAKDLQNFLDKTTFGDILNQMIIE QAPLINKL

HP0241	2709	TGGCGTTTAAAGTCCCTATTAAAGGATATGTTAGAAATCTTAAAAAGTTTTGACAAGGAGAAATTTAGATGAGGTCTTGATGAAGAAAAATACCTCAGCGTTTATTGCAAGTAGTGTGTTTATAGCGGTTTTATAGGGTCTTCTTCTACAGGAATCATCTTTTTCAGCCCTTAATAATCAAGAAAAATATAGATACTAATCTCCGGTAGTCCATCTATTAACACATTAAACGATGTGAGTTCAGTGGTTTTGAATGGCCTAAATCGCTGATACCTTATGACATTTGATGGTTATTTGTATCGTTGAAAAAGACTCCAAGCTTAAAGAAATCGCCACGATTAAATCTTATCGACCCACTATTATGATGAGGGCTAGAAACAGAGAGTCTTACACTTACAGCTCGCTACTTACAAGGGCGATAAAATCTTAACCTTTTCAGACCCCATTCAGTAAACCTCTTTTATCAATCTGTAGAAAGCGTTTTTGCAAGCCTTGAATACCTAAAGCGTGAAGTCTTTTGAGTCCACACCCCAATCCAGCGTTTCTAAATACATCATTCAAAGGCAGAAATAAGACGCAATTTTAAATGTAGGGCTGTTAGGAATCGCTTTGTTGGAGTTTTTGTAAAGATTTAGAGGATGGGAAAAATACCGCTACCAAGTCATGCTGAAAAATTTTCATGGGGATAAATCCAGGCTAGCGTATGAGGATGGGAAAAATACCGCTACCAAGTCACTAATGTTAGAGTGAGCCAAACCTCACACGACACATTGAATGGATTGGGATAAATCCACCCCAAGAGATGTGATAGCTTATCGCATTTACGCTTCCAATAACCGCAACGATAA	2710	RFKVPLLKDMLEYLKKVFDKENLDEVL DEEKILHAFIAK
HP0241	2711	TTTTGAAACATTTAACCCCACTCACTCACACCATCTTTAAAGCCTTATGGCTAGGCACAGCCTTAAGTGCATCTTTAAAGTTAGCGCGCAACAGAAAGCCCACTAAACAGAGCCTAAGCCCGCTAAAGGGTTAAAAACAAGCCAAATCGCCCGTTACTAAAGTCATGATGACCAATTCGACAAATATTAAAGATTTTAAACGTAAGCAAAAGAAGTCTTAAAGCCGCTTATCAATTCGGCTCTAAAGAAATTTAGGCTATGAATGGCAGCATTGCATGGAAGAGTCATGCGCAGGGTTTATAAATCAATTTTCGGATCCGAGCGCGGCGTGTATCTTATATCCAGCGTTCTAAAGAGCTATGGGCATAATGATAGCCCTTTTTCGTAATGTGATGGGGAATGCTCATTAAGACGATGCGTTTCTGAAGTGGCTTTAAAGAGTTGCTCTATTGGAACACGCTACCATGACAATTTAAAGACATGATTAATCTTACAACAGGGCAGTCGTTGGGAAAGGAGCGAAATCTAACGCTGATGCTGAAAAATATTACGAAGAGATACAAGACAGATCAGGCGTTTGAAAGAACTAAATCTTTGATTGCGAGTCTAGTAATGACCAAGAAATGCAAAAAAGCGCTAATAGCAACCTGGATTTAGACCTATCGCAACGCCATGCCCAAGCCTTAATTGCCAAAGAACTAAATAGAGAAAAACCCCAAGCAAGAAAAATCCCAAGAAATGAAAGAGACA	2712	F
HP0241	2713	AGCCAAAAACCCAGTAAGCCCAAGCCCAACCCCAACCCCAACCAACCAACCAATCCCATAAATGATTTAGCGATGCGAGGGATTTAAGGGCAATGATATTATGATGATAACCGCATGAATCTTATGTTGATTTGCATGAACAAGATAATTTCAATAAGGAAGAAAGAAATCCGCCAAATATCAACGACAGGTCGCGCTCCAAAGAAAAACCCCTTGGATGAATGAAAGCGGGATCAACGACAAATCCAAAGAAAAACGCGCATTCGCTAACGATAACAGCCAAAGTGATCAAAAGCACGACTGCAATCCCTGAAGAAGTGCAGCTCTATGAATTCGCGCAAAAGCGAAATTTGAATCTAGCTGATGTGATTA	2714	AKKPSKPKATPTAKNNKSHKIDFSDAR DFKGNIDYDDEITDEILLFOLHEQDNFN KEEEEKEIRQININRVRVQRKNPWWMN ESGKQRQSKKRAFRNDNSQKVIQSTT AIPPEVRVYFEFAQKANLNLADVI
HP0241	2715	GTAGTAGTGGCACTACTTGCTCCGGTTGGCTTATCAACCTTTTAGGGCAATCCCAACATGGAGTGAGCGATACGAATAATTAATTAATCTGCTCACTGAATTCATTAAACCGCGGTTTATCCAAATAATGATAGTAGTGTATCTACTAGTCTTACAAGCGCTTTCAAGCCATTACGAGCGCTATTTCTCAAGGGTTTCAAGCCTTACAAACGATATTAGCCCTATGCGGATTTTAACCTTGCTCCAGAGATTACTTCTAACACCAACCACCATTCAGTCAATCTCGCAACCTTACGGCAGCTTTT	2716	SSGTTCSGWLINLLGAIPTNGVSDTN LINLLTEFIKTAGFIQNNDSVSTSLTSA FOAITSAISQGFQALQNDISPNAITLLQ EITSNTTIQSFQTLRQL
HP0241	2717	ATTGCTCCATGCTGAAGACAACGGGTTTTTTTAAAGCGTGGTTATCAAAATCGGTGAAGCGGTTCAAAAAGTGAAAAACGCCGACAAAGGTGCAAAAACCTTCAGACACTTATGAACAATTAAGCCGGCTTTTAAACCAACGATAATGGCAAACTCAAAGACAAGCGCGCATCAACCAAGCGGTTAATAATTTGAACGAACCGCAAAACCTTTAGCCGGTGGGACAACCAATTCCTGCTTCAAGCCACGCTTTAGCGTTGAGATCGGTGATGGCTATGGAATAGCATGGTTATGCGGTATATGCGGAGTTATACCAAAAGTCCAGCGCAAAATCAAAAGATTTCCACTACACCGATGAGAATGGCAATGGCACTACAATCAATTCGGTGGGAGCAAAATAGTAATGGCACTCATAGTTCTAGTGGCACAAAATACATTAAAAACAGACAAAAATGTTTCTCTATCTATTGAGCAATATGAAAAATCCATGAAGCTTATCAGATCTTTCAAAAAGCTTTAAACAAAGCCGGCTTGCTCTCTTAAATAGCAAGGGGAAAGTTAGAGCGCATGTAAACCAATCA	2718	LLHAEDNGVFLSVGYQIGEAQVKVNA DKVQKLSDTYEQLSRLLTNDNGTNSKT SAQAINQAVNNLNERAKTLAGGTTNSP AYQATLLALRSVLGLWNSMGYAVICG GYTKSPGENNKGDFHYTDENGNGTTI NCGGSTNSNGTHSSSGTNTLKADKNV SLSIEQYEKIHEAYQILSKALKQAAGLAPL NSKGEKLEAHVTTTS

HP0241	2719	GCGGGACCTTTTGGCGTTATCAATAGGCACATTAAAGATATGGAACAAATAATAGATAGTTTTATGTTAAATAA TCCTATGGCTAAACGCTATCTTTCAGAGTGCCGAGGTAGAAATCTTCAACCTTTTGGGACGGATCAGAAAGTTG GTTATAATCTTAATGGAGATGCTGAAATAAGCAATATTATTAATGGAATAAAGTTTTTAATAACCCCAACCCGAAAGC CCTACTCCAACGCACTTTAGAAATTTCCACAAAGAAACGATCTCGTGTAGATTTTTTCGCTGGGAGC	2720	GTFWRYSIGTLKDEQNNRIVFNGKN PMAKRYLSEVAEGRKSSTFWDGSEVVG YNLNGDAEIKQLFNGNKNVFNPKPEAL LQRILEISTKENDLVLDFFAGS
HP0241	2721	GCGTGCCAAATTAAGCGCAGAGCCTAAGTGGTATAGCAAGGCTTACAAACAAACACCCAAAGGCTATCTTT ATGGGAGTGGTTCAGCCACCTTCTAAAGAGGCTTCTAAACAAAGCGTTAGCGGATTAGTGGCGTCTATTAGCGTG GTGGTTAATCCCAATCCATATTCAAATAAGTCTGTGGACAATAAGTTAAATCCAGCGATTGCGAAACGATTAAAC TTAAAGACCGATGACTTGAATTAATAATGTAGAAATTTGCAATCAAGAGTGCAAAAGGATCTACTACACCCAGA GTAAGGATCAATCAAAACCTTGTGTTGCGAGGTTTAAGGGATAAGTATAACGCTCTTTATGGGCGAGTTTTCCACCTTA ATGCTTAAGGTTTGTAAAGGGTTTT	2722	GANLSAEPKWYSKAYNKTNTQKGYLE GSGSATSKKASKQKALADLVASISVVV NSQIHIKSRVDNKLKSSDSQTINLKT DLELNNVEINVQEVQKGIYTRVRINQN LFLQGLRDKYNALYGQFSTLMPKVCK GV
HP1570	2723	TGTTCAAGTGAATTAAGCGGAGCGCTTGCGGTATGCCATTAGCGCTTAAAGCTACGGGTTTGATAAA TTTGCAAAATTAGACAAGCCCATTTATTACGGGTGTTGATTTTGGGGCGGACGACGATTGACCTTTGCAAA ATGGGAAAAAGCGCTAATCTAAATTCGCTTACAAATGACGCAATTTAGCAATGGAGGGATAAGTATTAGCGCA GTGAAATTTATTGGAATTTGCTTGGCTTGGAAATGTATGCCCAAAATTTCCAAAGCTGAAAGCAAAAGATGTTGTCA TTGCTAAACCCCACTATGACAGGATGATACGCAACGCTTTGGATCTTTATGCAAACTCCAGAGAAAGCACGCTTG AATTGCAAAACGATTGCTTCTAATGCTTAACTTGGCCCTTTTGAAGAAATAGACGCTAATATAGAGAGGATAGAA ATGAAGAAATTTAGATAGAGGCTTTGAAAGGAATTTAAAGTCCAGCTGTTGATAGGAATGGGGAGATTACCCA GTAGAAGACTTCAAGTGATGCTGAAAGAACTTTAAACCTCTTAAAGACAAGATAGATGACGGCTTAAACCTTC TTTGACGGAATTTCTAAAGTGATGCTGAAAGAACTTTGAAAGTCCAGCTGTTGATAGGAATGGGGAGATTACCCA GCGAGCAATCGGTGCTGCTCAACAAGCGCTTTGAAACGCTAAAGAGAGCAGCTCAAGCTTACAAAGCAAAAG CTTCTAAAGATGATTTACATTCATCTTATGAGCGCTAGGACAGAGCCTCAGACAAACAGATTTAGAGCTTA CAGGAGAAAGACGTTTCTAACAAGCCGCTTATTAAAGCCACTTGCAAAACCGGTGCGCTTCGGACTTTTAGAA AGCAGACCCCAAGCGGGGATTGAAGACCCCTCTATAGATTTTAACTCTGTGTTAAATACGATTTGGGTATTGAG AGAGAAGGGAAATTTCCA	2724	FKVELKASEPCAYAISALKSYGFDKFAK LDKPIYYGVDFGGGTTDFDGFQKWEK SANPKFAYKMTFHSNGGD.YLGGENL LELLAWEMYAQNFQELKAKDVIAPKN YDRIDTQRFSGFMQNSREARLNLQTA SNLRPFLEKLDANIEAIEENEEFEIEGF EKEFKVQLDRNGGSDSPVEDFKVDYK ELLNLLKDKIDDGVKNFFACFSKVM NIDNQCRAFHIFLGGNASKSVLVKQAF ENAKEEQKAYKQKTSKDDFTFILYEPL GTEASDKQILELTGEDVSNKPAYLKPT CKTGVAFGLLLESRPKAGGIERPSIDFN PVFKYDLGIEREGKFHTRISIRDSLKPNE YQIFQTKEEWGGDFGLEIRYSDKSLAN TNTLIEDTQLIFIALEEHEEVDVKVCSI
HP1570	2725	CAAGAAGCTTGGCTAAATAAACCTTTTAAAGCATGCAAGAAACACTCGCTTGGCCTAACCTAGAAAAATAT CAAAACAAATCCTTGTGTTGATGAGGTGAAATAACGCCAACGATTACACCTAACAGAGCTTAAAAAATCTTAA ACTTATTTGGAGCAGAACTCCCTTTGATCGCTCAAAATGCAAACTTACACCCATTTTAGCATTAGGAACAAC GCTAAAGTTTTGGGAGTTGCTTATCATACCGCTTGAATTTGCTCTTTTACTAGTTTGGCCCAAAAGAGCGG ATTGATTATGTCATCATCCATGAGCTAGCCACACGATCCACAAACCATTCCAAAATTTCTGGCGTTGCGTTCAA ATCTTTTGGCCCTAATTACCGGCTCTAAGAGAGCGTTTAAACAAATAACCATTTTACGCCCAACTTCTCAAAACAT TACAACCTTAAATTAATAATGATAGCTACATACGCTGTGATGCTCCTAGGAGCGGCTTCTTCCCGTTAGGC TAGTGCCTATCCGCTAAACCAATATTTATGTTAAATAATGTTATTGATTGC	2726	QEAWLKKTFLSMQEKHSLRTNLEKY QNKILVFEVKNANDYTLTELKILKTY LEQKLPLIAQKMQTSYTHFSIRNNAKVL GSCSYHNRLSFALLLVCAQKEAIDYVII HELAHTIHKHNHKNFWRCVQIFCPNYR ALRERLKQNTIFYAQLLKTLP
HP0448	2727	AGGGCTTAGGATTAGCTTTTAAAGCATATTGAACGCCACCAAGTTCTAGCTTTGTTAGACGCTTCCAGGCTGG ATTTAGGCATTAAAGAGCAATACCAACGCTTGAAGTTGGAGTTGGAAATTTTCATCCGCTTGGCCAAATAGCCCTT TTGGGGTGTGCTCAATAAATGCGATGTTGTAGAAACATTTGATGAGATGACTAAGGATTTTGTGCTTTTAAATTT GGGAGCGCAGAAATTAACGAGTTTGGTTAGAGCGCTATTAGGTTTTGCACCCCATTTAACCAATGATTTGA AAATAACCCCTAATGAGCAATCAGCGCTCTTGTCTTGGCCCTTTTCAGCGGTTAGCGCTCTTAATGTGCATGCACCTCA ATTTGTGTTGTTGGAAGCGTTACCCCTAAACGCTATTTTAAATAATCCATTAAATAAAGCGGAGGAATGAAAGAT TTGTTTGTGTTTATTGTTGCTGCGTTGCGTTCAAGCTTACGCCGAGCAAGATTACTTTTTTAGGGATTTTAA	2728	GLGISFLKHIERTKVLAFLVDAASRLDLGI KEQYQRLRLELEKFFSSALANKPFGVLL NKCDVVENIDEMTKDFCAFNLGAQKL NEFGLPEYLGFLHPHLTNDFENNPNEQ SALFVLPLSAVSALNVHALKFVLEALP

[illegible]

HP1537	2737	ATGAAATTGTAAGATTCTGTGGCGGATATTGTGATTCTAAAAAATAGACACCGCTGTTTGGCTTTGTTCAATC AAGGGTATTTAAAGACGTTTATGCCACTTTTGAAGCGGATATTAGAGTTTCAATTTGATGAAAAAGCCAGGATTG CCGGGTAGAAATCAAGGTTTATGGACTGAAAGGAAAGACGGCTTAAATCCCAATGGGATCAAAAAGGG CGACACCTTTGATGAGCAAAAATTAGAGCATGCTAAACGGCTTAAACCGCTTAGAGGGCAGGGCTATTATG GGAGCGTGGTGGAGTGGCCACAGAAAGTCAAGTGGGTCATTATTGATCGTGTGTTGATGTAATAGGGGG ATAGCATTATATCAACAATCCATTATGAGGGAAGCGCAATTAACGCGCATGATTGAATCTTTGAGTGCGA ACAAGCAACGAGATTTCAATGGCTGGATGTGGGCTTGAATGACGGGAATTGCGTTTAGATCAACTAGAAATACGAT TCTATGCGTATCCAGATGTGTATGCGTAGGGTTACTTAGACGCTCATATTTCTCGCTTTTGAACCGGAT TTTTCTACCATGACGCTAAGCTTCAATTATAAAGTCAAGAGGGGATCCAAATAGAGATTTCAGACATTTAATAGAG ATTGACACCCGGTAGTCCCTTAAAAACCTTAGAAAAAGCGCTTAAAGTAAAAAGGAAAGATGCTTTAATATTGAG CATTTAAGAGCGGATGCGCAAAATTTAAAAACCGAAATCGCCGATAAGGTTATGCGTTTGGGTGGTGAAGCCAGA CTTGGATAAAGATGAAAAAACGGCTTGTGAAGTCAATTCGTATTGAAGTGGCGATATGTTGATATATCAATGA TGTCATCATTTTCAGGGAACCGACGCGCATAGGATCATTAGAAGGGAGTTATTGTTAGGGCCTAAGGATAAAT ACAACCTTGACCAAACTGAG	2738	EIVKIRVGDIVDSKKIDTAVLALFNQGYF KDVYATFEGGILEFHFDEKARIAGVEIK GYGTEKEDGLKQSMGKKGDTFDEQ KLEHAKTALKTALEGQGYGGSWEVRT EKVSEGALLIVFVNRGDSYIKQSIYE GSAKLKRMIESLSANKQRJFMGWM WGLNDGKLRDLQLEYDSMRIDVYMR RGLYDAHISSPFLKTDSTHDAKLHYK VKEGIQYRISDILIEIDNPVVF'LTLEKAL KVKRKDVFNIEHLRADAQIL KTEIADKG YAFVAVKPDLDKDEKNGLVKVIYRIEVG DMVYINDVVISGNQRTSDRIIRRELLGP KDKYNLTCLRNSENSLRRLGFFSKVKI EEKRVNSSLMDLLVSVEEGRTGQLQF GLGYGSYGGLMLNGSVSEPNLFGTGQ SMSLYANIATGGGRSYPGMPKGAGRM FAGNLSLTNPRIFDSWYSSTINLYADYR ISYQYIQGGGGFVNVGRMLGNRTHV SLGYNLN
HP1537	2739	AATTTTACAAAAATTCGCCAGAAATCAAAACGCTTATGCGGCGAGTGAGAAATTTAGACGAGCTTTTAAAGCATGCTA AAATTTCTAGTTGATGTTTATGCCAGAGCGTATTCTAAAGCGGATGTACAAATGAGTATTGAATCTTAAAGGGCT TTTGAAATCGCTCTTAAAGACGAGAAATAATCGCTTTTATAGATTATTAGCCAAAAATATTATTAGTGAGGGTAT TTGCAAAAACAAAGACACCGGTGAAGAAATTTTGGCTTTTCCCAAGGAATGTGGGAGCTTTGTTGAACTTTTG CATGCGTATGAATTAGAAAAAGACTATTCAAGGCTTTAGAGACTTTGGAATGTTTGGAGAAATTAGAAAGTGGTTGAA ATTGAAACGATTAAAAATACCTTTATCTCATGCAATTAATAGAAATAAAGAAAGATGTGGCTAAATTTTGATGTTTC AAAGCGCTGCTTAGATTTGAAAAAATCGCCCTGAATCACTTAAATCGCATGATGAAATCTTTTGGCAAGAAAT GATGCAACTAAACGGCTAGAAATGTGATCGATCTTTATGGGA	2740	FLQKFAQNQNAYAGSENDELKHAHI SSLMLARAYSKADVQMSIEILKGLNR SLKDEEKIADVLLAKNYFSVGYLQKTK DTVKEILRFSPRNVGALLKLL HAYELEK DYSKALETLECELEWEIEIKNYLYL MHLIENKEDVAKILHVSASL.DLKIALN HLKSHDENLFWQEIDATKRL.ENVIDLL W
HP1537	2741	GAATGGGTGGAGATTGAGGTTGGAGCATTTGGATAAGTGATTTATAGATCAAGCCCCCATAGGCAAAACCC CACGAAGCAACCTGCCACTTACAGGAGTGATGATGAATCAGGATTTTATTTGCGGAGCAAAAAGAAAGCTAAA ATTTAGGCTATAGTGGAGCGTTTATGCTTTAATGTTAAAGGAGGCGGTGCGAGAAATGCCAAGCGGATGGGG ACATTAAATAGAAATGCATTTTGGCTGATGTGTAGTCCAAATCGGATGTGTAAGGGCGCTAAATACAAACCC AACTTTAGAAATCAAGGTGAAGGCAATCCATTCGCGATGTGTTGAACATGAGCGTGAAGAGGCTTATGAATTTT TTGCTAAATTCCTAAATCGCGGTGAAGTTAAACCGCTTATGGATGTTGGCTATATCATCTTATAGGGC	2742	NGVEIVGLEHDKVYLDQAP'IGKTPRS NPATYTGVMDEIRILFAEQKIEAKILGYS ASRFSFNVKGRCEKCCQGDGDIKEM HFLPDVLVQCDSCKGAKYN'PQTLEIKV KGKSIADVLNMSVEEAYEFFAKFPKIAV KLKTLMDVGLGYITLG
HP1537	2743	TATTTTGTCTTGGCTTTATAGATTAGCGATCAACGCGCCCAATACACCAACTCTTTAAAAATGACTAAACAAGA AGTTAAGGACGAATACAAACAGCAAGAGGGAACCCAGAAATCAAGCCAAATCCGCCAAATGATGCTAAAAAACG CCACGAATAAATGATGCAAGAAATCCCTAAAGCCAATGTCGTGTTACTAACCCCACTTACGCCGCTCGCTC AAATTTGATGAAGAACACCTGTGCTGTGGTAGTGGCTAAAGGCACGGAATATTAGCCATTAGGATTAGGGCAT CGCTAGAGAGCATGACATAGAAATTATAGAAAAATAAACGCTCGCCAGAGAGCTTTATAGAGATGTGAAATTAAACG CTGCCATACCAGAAGATTGTTGAAGCCGTGGCGATAGTCTCGCTCAAGTGGCTAAATTAGAGCAAGAACGCCAA AAACAAAAGATCAATTAACCTCTTTAAGATTTTAAACCCGCTTTAAGCCCTAAAAACACTCAATCAAAAGGCTT TAGCTATTCCCTATTGAGCTTTAAATTTGATGTTCCAAACGCTTAAAGTGTATGCACATATTCTAAAGCCACCTA ACAGGCCCTAAAAAATAAAACCCCAATCGCATGCCATAGTATCTTTAGTTGAATGAACATGCTAGAGCATAG	2744	FFVLAFIDLAIKRRQYTNLSLKMTKQEVK DEYKQQEGNPEIKAKIRQMMLKNATNK MMQEIPKANVVVTNP'HYAVALKFDEE HPVPVVVAKGTDYLAIKIGIAREHDIIEI ENKTLARELYRDVKLNAAPI:ELFEAVA IVFAQVAKLEQERQKQIKPL

HP1537	2745	TCGCTAAAAACACCCAGATTGTATTGAATTAAGAGTGCATCCAAAGCATGATTAAAAACGAATGCATGCTCTCTAAAG TGGATGGGGTATGAACGCTATCAGCGTATAGGGGATAAGGTGGCGAGACTTTGTATTATGGGGCTGGGCTG GGGAGAGCCTACCGCAAGCGGTCATTAGCGATATTATAGAAATCGCAAGGAAAAAAGCTCTCTAATGCTGGG CTTGAAACCCCTCAAAACTCCCTAAACCCAAAGAAATCCAAATGCGCTTATTATGCGCGCTTGTAGTGAG CGATGAAAGGGGTTTTCTCAATCAGCGGATTTTAGCTCAAAATGATATTCGCTCAACAATGTCTTGCAAAA AGAACTTTGCAATCCAAAGGCTAAATCTTATTTCCACGACACCCACCAAGTCTATGCTGAACGCCCT TAAAGAGCTTGAAATTTACAAAGCGTGTGGATACCCCAAGATGATCGTTTGAAATTTGAATGCGCTTTTGAA CAACAACATAGAGAAAGGGCTTAAAGGCTGAAGAAAGCTTGGGATTTTAAATCGTTAGGTTTGAATGGT GGAGAGGAACTTTTTCACAAATTTGGCGAAATGATATTCGCTTGAAANAAGGGTTTGCATTTCAATGAAGTC AAAAGCGGGGAAATTTTGATCCCATTTATCGCATCACCGGAGCAAAATTAANAAGATGATTAANAACGATCCGCTGT TATTTGTCCTCAAAAAGATCCCAATAGCGATTTTGATAGACGCTCTTATTGTGAAAAATGGTAAATTTGAGCTTTTAG AAAATATCACITTTTAGATTTTACAGAAAGTAAATGCGA	2746	AKKHPDCIELRVHPMIKNECMLSKVD GVMNAISVIGDKVGETLYYGAGAGGEF TASAVISDIEIARKKSSMLGFGFETPQKL PLKPKKEIQCAYYARLLVSDEKGVFSQI SAILAQNDISLNNVLQKEILHSNKAKILF STHTTNEKSMNLNALKELNLSQSVLDT KMIRLEN
HP1537	2747	ATTTAAACGCTTGAAAGATTCACACCATATTTAGACACCAAAAAGCCCTTTTAGCATGCGACACTAAAGCGG ATGGGGGATGGCTGAGCCTTTAGAAATCCTTTTAAAGCCGCTCAACGCTCTAAAGACGCTTATTTTGAACA GAGAAGTCATAGTCATGGCGGCGGAGTATAGAAAGATTGACAGCGTTGCAACGATTAGCAATCTTTCTAGCGG GATTCAGCGAGCGCTTAGCTTTGCGGTTATATTTAAGGGAGCCAAAGTTACTTTGATCGC	2748	LKRLKDSNHILDTKNALLACDTKGDGA MAEPLEILFKAATLLKDAYFENREVIV MGGASIEKIDSVRTISNLSGQIASALA LALYFKGAKVTLL
HP1537	2749	CCGCTCAAAACACCGCAGCATGATTAGAAATGATTAGCGGACCGGTGTGTAGGGCATTGAAAAATTACG CGCGCCATTTACCGGTAAAGCCCTAACGAAACGCCCTTTTGCTTTGATTATTAGGGATTTTGAGCGGGAGT TTTTAGTCATTGGATGAAAGCCATGTGAGTTGCCACAGTTTGGGGGATGTATGCGAGGGATATGAGCAGGAAA AGTGTTTAGTGGAAATAGTTTGTGCTAGCGCTTAGACAACCGCCCTTTAAATTTGATGAATTTATCCATA AAATTGCCAGTCTTTTGTGCTAGCGCTACGCCCAATAGCTAGAAATAGAGCTTTCCAAAAGAAATGTCGCTGAGC AAATCATTCGCCCTACAGGGCTTTAGACCTTAAATTTGAAGTGGAGACAGCGGATAAGCAAGTCCAGGATTTGTTT GATGAAATCAAGTTAGTGGTGGCTAGAGGTGAAAGGCTGCTCATCACCGCTCACTAAAAAATGGCAGAAAT GTGCAATATTATGCTGAATGGGCTTGAAGCGGCTTACATGCATAGTGAATGATCGATTGAAAGGAATCACA TCATCCGCTCTTAAAGGCTTAAAGAAATTTGACATTTAATAGGATCAATCTTTAAGAGAGGGCTGATTGCTG AAGTCTCTTTAGTAGCGATCATGATGCGGATAAGAAAGGTTTTAAGGAGTGAACAAGCCTCATTCAAACCATG GGCGAGCGGCTAGAAACGCTAATGGCAAGGTTTTATTATACGCTAAAGATCACTCAAGCATGCAAAAAGCCTT TGAGATCACTAGTTACAGGGGCGCAACAAGAGGTTCAATAAATCCATAACATCACCCCAAAACCGTTACGC GCGCTTAGAAGAGGAATTGAAATTAAGAGACGATGAAATTAGAATCGCTAAAGCCTTAAAAAGGACAAATGCCTA AAAGTGAAGGGGAAAA	2750	RLKQRTHEHLEMSATGVCKGIENYAR HFTGKAPNETPFCFLDYLGIFEREFLVI VDESHVSLPQFGGMYAGDMSRKSVLV EYGFRLPSALDNRPLKDFEFHKNQCF LFVSATPNKLELELSKKNVAEQIIRPTG LLDPKFEVRSDKQVQDLFDEIKLWA RGERVLITTLTKMAEELCKYYAEWGL KARYMHSEIDAERNHIIRSLRLKEFOILI GINLLREGLDLPEVSLVAIMDADKEGFL RSETSLIQTMGRAARNANGKVLVYAKK ITQSMQKAFETSYRRRAKQEEFNKIHN TPKTVTRALEEELKLRDDEIRIAKALKK DKMPKSEREKIIEKELDKMRECKTNLD FEEAMRLRDEIAQLRTL
HP1537	2751	CACCTATCAAGCCGTGAGTGGGCGAGGGAACAAGGCATAGAGAGTTAAAAATGAGTTAAAAACCGCTTAGAGT GTTTGGAAAAAGACCCCACTATTGATTAAACCAAGCTTTCAGAGCTGGGCTTTTCGCTTATCCGATCGCTTTCAATG CGATCGCTCATATTGATACCTTTAAGGAGAAATGGTTACAGAAAGAGAGCTAAATGCTGCATGAAACCCATAAAA TCATGGGCGTGATTCCCTATCAGCGCGACTTGGTGGCGGTTAGGAGGCCATAGCGAGAGTTTGAG TATCGCTTTTGAANAAGAAATCGATCTCAAGAAAGTCTATGAAGTTTAAAAACGCCCTAGCGTGGCTTTGCGGA TGATCCAGTCATAATCTTACCCACGCCCTAAAGCGGAGCCACAGGATAGCGTCTTTATAGGCGCTTGAGGA AGGATTTGTTGATAAGAAACCTTTGCTAGTGGCTTTGTGGCGGATCAATTGAGAGTGGGCGAGCCACCAACGCA CTCAAAATCGCTCTGATTAACATTAAGAACGCTTGAGTTTATTCAAGATAACAAGATGAATGTGCATGCGCTTGAA TTAAGGATAAGGATCAATCTAGCCCAATCTCTAAAGAAAGAGCTTTAAGTTACTAGGCTTGGATGTTAAACAAGGGTG TAATTGAATTTCTAAGGCTTGATTGAGAGAAATGCTAATATTGGTAGGTTCAAGGAATGATAAGGCTTACACTC AAGCAGAGAGTGAATGTTTAGCGGATTATTACTTATTATTCCTTTTAAAGGGTGTGAGTTTAAAGGTATAAGGA AACTTGATCAAGTTTGTGGATGATTAGAAATCTGATTGGATTGACCTTACAATTTTCAAAACCAATCGTT TAATAGCGATTAAATATGGCTATATATACTACATAATAAGATTGAAAGGTTGGTAATGGAATCAGTAAAAACAGGA AAACAAATAAAG	2752	TYQAVSGAGNKGIESLKNELKTALECL EKDPTIDLNQVLQAGAFAYPIAFNAIAHI DTFKENGYTKEELKMLHETHKIMGVDF PISATCVRPVLRSHSESLIAFEKEFD LKEYVEVLKNAPSVAVCDDPSHNLPT PLKASHTDSVFIGRLRKDLFDKKTLLHG FCVADQLRVGAATNALKIALHYIKNA

HP1537	2753	GAAATATTTGCCTAGCGGTTGGCTGGGCTACAAATAGTTAGCCACAAGCAGGCGTTTAAAAACAAGACGGCA CGCTAGCGGAAGAGGTGCTTTATAGATGCGCGTTTGGCGAACGGCTGAAATCGCTAACAGTATTGAG CAAGGGTTCAAGCGTTTATAGAGAGGCGTTGACTTATGAGAGTTGGATGATCAACGGGCAAAAATAATCC GCCACACTATCACAGCGGACTGTTGCAATTTATGGATAAAGTCAGACAATCCCAAGCAACGCTATGCAAGAT AGTATAATGCATGAGAAATCCCAACACGCTTATCCCGCTAATCATACGCTCCAGCCAAAGATCCTTTAAACCAAGCT TATGCGCAAAACGCTTACGCTAAAGAGAAATTTACAAGCACAGCGCTCAAGTATCAAAACAGCGTGCCTGAAATCAA TATTGATGAAGAGAAATCCCTTTTAAAGGTTAAATTAAGGAGACATTATGAAAGAAACGCTATTCAAAACGCT ATTGCAAAATACACTGAAGCTAAATCAGCTTTATGACTATAAGATTAGACATGCTCAAGCACACGCTATCAGAGC GCTATAAAATCATGCCAAGGAGATTGACAGGCAATAGCAAAAAGTGGCAAGAAAGGTTGGAAGTAGCGATCAAAAG AGCCCGCCACATGGCTTTAATCCCTACATTGTGGACAGGAAAAAGTCGTGGATAGCCCTTTTAAACAGCACATAA TGTGTTGATTAGGCTAATAGGGGCGCATGCCCTTTTAACTTATTAGTTTGGCTCTATTTTGTAAATATTGGTTGT AAAAGCGTTA	2754	KYLPSSGSAATIGLATERRFKKQDGL GEEVCFIDARLFGRTAIEIANQYLSKGS SVLIEGRLTYESWMDCTGKKNSRHTIT ADSLQFMDKSDNPQANAMQDSIMHE NSNNAYPANHNAPSQIDPFNQAYAQNA YAKENLQAQPSKYQNSVPEINIDEEIP F
HP1537	2755	CAACGACACTTCCCTACCGCAATGCACATTGTGAGCGTGCTAGAAATCACGCACAGACTGCTCCCTAGTTGGAGA ATCTGTTAAAAACCTTTAAAGAAAAAGCCCAAAATTTAAAGAGATTGTCAAGATCGACGCACGCAATTTACAAGACG CTACGCCCTTTAACTTTGGGCAAGAAATTTAGCGGGTATCGAGCATGCTAGAGCATTTAAACAACAATTTTAGAGA GTTTGGAGCATTTAAGAGAAATAGCCATAGCGGGACGGCGTAGGCACAGGGCTAAACGCTCATAAAGAATTGAG CGAAAAGTGGCTGAAGAAATGAGCCAGTTTAGCGCGTGAATTCGCTCTCGGCCCAATAAGTTCCATCGGCTCA CTAGCCATGACGCTATCGCTTATGCGCATGGGCTTTTAAAGCTTTAGCGGCAATTTAATGAAATCGCTAACGAT ATTAGATGCTTGGAGCGCGCGCTGTGTTTGGCGAGCTTAATATCCCTGAAACGAGCGCGGCGAGTTCTA TTATGCCCGTAAAGTCAATCCACGCAATCGGAAGCGATGACAATGGTGCGCGTGAAGTATGGGAATGATAC CGCTATTGGCATTGCGCCAGTCAGGTAATTTGAATTGAACGTGTTCAAGCCGTGATCATTTATAATTTCTTGCA AAGTTTAAAGGCTATTGAGCGATAGCATGGAAGTTTAAATATCCATTGCGGAGCGGCAATTGAGCCTAATAGAGAA AGATTGATTATTACTTGACCACTTCTTTGATGTTAGTAACCGCCCTAAACCCGCATGTGGGCTATGAAAAACGCCGCTA AAATCGCTA	2756	NDTFTAMHIVSVLEITHRLPSLENLL KTFKEKQQQFKEIVKIGRTHLQDQATPLT LGQEFSGYASMLEHSHKQKILESHLR ELAIGGTAVGTGLNAHKELSEKVAEEL SQFSGVKFVSAPNKFHALTSHDAIAYA HGAFKALAAANLMIKIANJIRWLASGPRC GLGELNIPENEPGSSIMPVKV/NPTQCE AMTMVAVQVMGNDTAIGIAASQGNFE LNVEKPIIYNFLQSLRLI.SDSMESFNIH CASGIEPNREKIDYYLHHSLMLVTALNP HVGYENAAKIA
HP1537	2757	TATGACGGATAACAAACCAATGAAACCATGAAACAGCAGTGAAAAATTCAAAAGCTGATGAGATGCGAGCCG GAGCGTTTGAGCGCTTCAACCAACCGCAAAAGCGTTTCAGAGAAAACGCGCAAAAACGCGAGATATTCAAACCAT GAAGCGTCTTCGCACCATAAAAGAGCATCGCCCTAACAAAAACCAACCAACCAACCAACCAACCAACCAACCA AACACGAAATTACGCCCAAGAAATTGGATAGCAACAAAGTAGAGGCGTTACGGAAATTTGCGATGTGAATGAGA GAGGGACTTTAGGCTTTCATAAGGAGTTAAAAAGGCGTTGAAGCGAATAACAAGATCCAAGTGGAGCATTTAAAC CCGCATTATAAGATGAACCTTAAACTCTAAAGCGAGCGTTAAATCACGCCCTTTAGGGGCTTGGGTGAGATTGGGG GAACATGATGGTCATTGAAACCCCAAAAGCGCGATCGTGATTGATGCGGGCATGAGCTTCCCTAAAGAGGGGCTC TTTGCGGTGGATATTTAATCCCGGATTTTCTACTTGACCAATCAAGGACAAATCGCTGGCATTATCATCACC CATGCCATGAAGATCACATAGGGGCCACGCCCTTATTGTTTAAAGAGCTGCAATTCGCCCTTTATGGCACGCCCTT GAGTTTGGGGCTGATTGGGAGCAAGTTTATGATGAACATGTTTGAATAACCGCTCGTATTTTAAATCGTAGAAAA GCGTGTCCCATAGCGTGGCGAATTTATCATTTGAATGGATCCACATCAGCATTCATCATTTGACAGCAGCGCTT TAGCGATCCAAACTAAAGCCGGAACGATCATCCACCGCGGATTTTAAATCGATCAGACCCCGGTGGATAATTTG CCCACGGATTGTATCGTTTAGCGCACTATGGCGAAAAGGGGTGATGCTTCTTTAAGCGGATTCACCAACTCCCA TAAATCCGGGACTACGCCGAGT	2758	MTDNNQNNHENHENSE:NSKADEMRA GAFTERFTNRKKRFRENAQKNAEYSNH EASSHHKKEHRPNKKPINHHKQKHAK TRNYAQEELDSDNKVEG/TEILHVNERN TLGFHKLKKGVEANNK'IQVEHLNPHY KMNLNSKASVKITPLGGLGEIGGNMMV IETPKSAIVIDAGMSFPKEGLFGVDILIP DFSYLHQIKDKIAGIITHAHEDHIGATPY LFKELQFPLYGTPLSLGLIGSKFDEHGL KKYRSYFKIVEKRCPIVGEFIEWIHIT HSIIDSSALAIQTKAGTIIITGDFKIDHTP VDNLPTDLYRLAHYGEKGVMLLSGST NSHKS GTTPSESTIAPAF:DTLFLKEAQQ RVIMSTFSSNIHRVYQAIQY

HP1537	2759	AAAGCTTCCACITTTCAAGAGCTTGTGAGCGTGATTACGGCATGGTGTAAACGCAGAGTGGCTGAAACTTTAG AAGAGGTGGAAAGGCCATTATAAGCATTTCAAAACGCTTTGAAATGCAAAAGTGGGCAATCGCTAGGGTA GAACTTAGGCGCTCAAGTGGCTTATGATAAGGCCCATATCGTAGCGTTAAGGCTAAAGACGTGTAGAAAGTTTC GCAGCTCTCGTCAATTCATTTATCTAGCAAGGACGATTTAGTGCCCTCAAGCAAAATTAGAGATCCGCACGGAGAA AAATCTGCCGATCTGAGCTTTTGTCTTCCACGCTCAATTCCTACCCGTTTAAAGACTTTAGAAAATCAGATT CAAATCTCTAAAGAAACACGAAATTACAGATCGCTAAATCTTCCCAAGTGAATTTTGGCTCTTATATTATGA AGCAAAACAATTCGGTGTGAAGACATGATCCCTAGTTGGTGGCGTGGCGGCGCATGCTATCTTTCT CCACAGGGCGCATTCAAAATACCAAGCGAGCAAAATTAGCGAGTTGCAAGTAGAGCAAAATCCAGGCTA AAAAACATGGAATTATTAGTAATAGACTTATAAGAGACGCTTCTTATTGAAAGATACAAAAGCTTGCTTTC TAGCGTGAATTAGCCAAGGAAACTTAAAGTCCAAGACGAGCTTTTACAGGCTTAAGCACGAACTGCTCAAG TCATTGATCGGAGAACGCTTCTTCTATCGTGTGAGCAAAAGCGTGGCTTATAAATACATCGTTTCATTAG CGAATTTAATGGCGTTAAGCGATCATATTGATTTATTTATGAATTTGTTAAGGGAAGAAATCATGTCAAAATAGCA TGTGGATAAAATAAAGCGATTCTTACAGGGGTGGGCTTTATTATTAGGCTAATCGTCTTTTATTATTAGCTTA TCGCCCTAAGG	2760	KLSTFQELVSYYGMVLNAEVAETLEE VEKGHYKHFNQALKMQKVGIARVET LGAQVAYDKAHIASVKAKDVLEVSQLS FNSILSSKDDLPVSSKLEIRTEKNLPDL SFFVSSSTLNSYPVLKLTLENQISKENT KLQIAKFLPQVSSFFGSYIMKQNNVFE DMIPSWFVGVAGRMPILSPTGRIOKYQ ASKLAELQVSSEIQIAKKNMELLVNKT YKETLSYLKEYKSLSSVELAKENKLQ EQAFLLQGLSTNAQVIDARNLTSSIVE QKSVAYKYIVSLANLMAISDHIDLFYEF VY
HP1537	2761	CTCTCACAGGGTGATGATAGATTATTGAGTGGGATGTGGGTTTGGGAAACAGAAAGTGGCGATGCATGCGGATT TTTTGCGCGTTTTGAACGGCTTCAAGCGCTTTAGTTGCTACCACTTTATTAGCGCACCGCATTTTGAGACT TTAAGGGCGGTTTTGAAATTTTGGCGTTAAAGTGGCTCGTTTGGACAGGTATCGAGCGGAAAGAAACAAGCTTTT AAAGCGGTGGAAATTAGGGCAAGTTGATGCGCTAATAGGCACGCTGCTTTAGCGCGGAAATTCAAAACCTG GGCTTGGTGGTGGATGAAGAGCATAAATTTGGCGTGAACAAAGAAAGCTTTAAAGAAATGAGTAAGAGCGT GCATTTTAAAGCATGTCGCTACGCTATCCCGCGCTCTAAACATGGCGCTCTCAAAATTAAAGGCTATTAGTTC TTTAAACCCCGCCACAGACAGAAAGCCGCACTTTTACATCCATACCACTACCTAGCATTTTAAAGTCAAAAC TTATTAGAGAGAAATTACCGCTAACGGGCAATTTTACATCCATACCACTACCTAGCATTTTAAAGTCAAAAC CAAGCTAGAGATTAAATCCCTAACTCAAAATCGCTATTGCTATTCCAGATTACCGCTAATGAGAGCGAAGAAAT CATGCTAGAGTTGCCAAGGAAATTATCAGGTTTATTATGCACTTCTATTGGAATCAGGATTCATTTGCTTAA CGCTAACACGATCATATAGATAATCGCAAAATTTGGGCTGGCTGATTGCAACCAATGAGAGGGCTGTGGGGA GAGTAAAGAAAGCGCTTTGTTATTCTCTCATAGAAAGATCAAAAGTTGAATGAACAGGCTTTAAACGCTTGC TCGCTTTGGAAAGAAATTCATATTAGCGAGCGGGAGAGTGT	2762	SHRVMDRLLSGDVGFGEKTEVAMHAIF CAFLNGFQSAALVPTTLLAHQHFETLR ARFENFGVKVARLDYASEKNKLLKAV ELGQVDALIGTHAILGAKFKNLGLVVVD EEHFGVKQKEALKELSKSVHFLMSA TPIPTLNMAISQIKGSSSLKTPPTDRK PSRTFLKEKNDLKEIYRELRRNGQI FYIHNHIASILVKTKLEDLIPKLIALHS QINANESEIIMLEFAKGNVQVLLCTSV ESGIHLPNANTIIDNAQNFGLADLHQL RGRVGRGKKEGFCYFLIEDQKSLNEQ ALKRLLALEKNSYLGSGES
HP1286	2763	GAGCGAGTGTGTGAGCGGTTACTTCTGTAGGCTTAGGGCAGCCCTAACATTCAGTTTCAGCTAATGACAAA CGGATGCAGGATAATTAGTAGCGGTGATTGAAACACAGACCAATAAAAGGTGCGTATTTAGAAATCAAACTTTA AAATCTAGCCAGGATTTAAATGTCGTATTGAAGATCCGGACACTAAATACATAATCCCGCTTGCTGAGTAAG GATGTAATTTAATCATAGGCTTAGCAACATATTCTTAGCAATAAAGCGATGATGCAATTAGTGCAGAAAC AATCAAAAGTTCAAGCTTTAACGCCACCCCAACAAATAGCGGAAATTGAACGCTATTTTAAATGAATACCGGCT GATTATCGGATAGAGTTGCCCTCTACTAACGCTGCAAAATAGGATAAAATCCTTATATTGCTCTGATCCCATGTGC CCACATTGCCAAAAGAGCTCACTAACTTAGGGATCATTTAAAGAAACACCGTGAGATGGTGGTGGGGTG GCTTGGGCTCAATTCAGCTAAAGCGGCTTTATCCCAAGAAAGATGGCGAAAGCTAGGGCTAGGGGAGCGGAGC GIGGAAGATAAGATCTCTATTCTTGAAAGATTATTC	2764	ASVLSALLVGLGAAPKHSVSANDKRM QDNLVSIEKQTNKKVRILEIKPLKSSQ DLKMVVEDPDTKYNIPLVWSKDNLIIG LSNIFFSNKSDDVQLVAETNQKVQALN ATQONSAKLNAIFNEIPADYAIPLSTN AANKDKILYVSDPMCPHCQKELTKLR DHLKENTVRMVVVGWLVGNSAKKAAL IQEEMAKARARGASVEDKISILEKIYS
HP1286	2765	TCGGTGGCGTGCCATAGGGGTGATGCTCCATAAGCAGCAAGCATGACCTTTAGCAAAACCGCTGATATTGA AAGCACTAAATAATCAAAATTGACAGACTCAAACTCGCCGGGCGGATTTAGTAGGGGTGGCGGTGAGTAATGAAAAG GACGCTCTAGCCTTAAAGAAATTGAAAAAGTGTCCCTTTGCTTAAATCGCTGATATTCTTCCATTATAAATTCG CTCTCATTCGCGCTCAAGCGTGTGATCGGATCAGGATTAAACCCGGAACATCGGCTCTAAAGAGAAATCAAGC GGTGGTTGATGCTTGTAAAGAAATAAATCTCTATAAGAAATTCGCTGAATGCTGGGAGTTAGAAAAGCAGTTTGA TCAAAATACGGACCCACCCCAAGGCATGTTAGAAAAGCGCTTTGTATAA	2766	GGVAIGGDAPISTQSMFTFSKTADIESK NQIDRLKLAGADLVRVAVSNEKDALAL KELKVSPLPLADIHFHYKFAIAAQSV DAIRINPGNIGSKEKIKAVVDACKEKNIP IRIGVNAGSLEKQFDQKYGPTPKGMVE SALY

HP1286	2767	ACGCCCTAGCTATGCGGATGATGAAGCTTTAGCGAAACGATTTTTACAAAACATGGTGATCAGCCTAC AGAAGAAAGAGATCTTTCGCCCACTGACTAAGATGAACGATCTTTTAAACCCGAACTCTGTGATTTATTG AATGAACCAAGCAGATAGCGATACAAAACCCGCCCTTGAACCAATGAGTCTAATACTAACACTGCCAATAACGAT ACAAAACCCGCTTCTTACAAACCGAAAGAAACAAAGATCCAAAGCTCATTTGAATATCCCAACAAAATTTCT ACCCCTAAAGGATGGGATATTATGATGAGTAAAGAGGGGATCAATGGCTGATAGAAATCAAATCCAAAGCCTTG AAGC	2768	RPSYVDSYEVFSETIFLQNMVYQPT ERDSFAQLTKDENDSI'NPETSVILLNE PSDSTKNPPLNQNE'SNTNTANNDTK NPFLYKPKRKTDPKLEYSQQNFYPL KGDIMMSKEGDQWLIEIKSKALK
HP1286	2769	CAGCGGGAGCCAGCTTGTAATCAATACCCCTATTTAATCAGCGTTTATAGAGCATTTTATCGCCAAAAATCC CTTTATGTGAGAGATGATGTTCTATTTTTTTTGAATTTAGCCCTATTTAAAGAAATTGCATTTCACTCTAAGCGTC AAACTCTCTTTTCTTAGAGGAAGAAAGCAAGCGGATCCATCTTAA	2770	GGEPSLYFNNPILISVLEHFYRQKPLC VESNGSIFFEFSPILKELHFTLSVKLSFS LEESKRIHL
HP1286	2771	ATGGAAGAAATTGTCTAAACGCCAAAGACTCCGCTCAAAACAGGCTCTCGCTCAAAAACAGAAAGCTTTAAGCG ACAACATTAAAGACACAGAGAGGTTAACGACCTTACAGCACAGGCGAGTGAAGAAATTAAGAGCGTCAATTA GAAGTCAATAGCTTGGTTCTCAATCGCTGAGATTACAAACGCATTAAAGAAAGTGGAACAAACAGAGTTTAAAG CATGCGAACGAATTAAGGATAGCGGATGAATGGAAATTCATTTGCGAGAGCTTTAGGGGGAATGTTTTTAA AAGCAGCATTAAGACTCATTCGCTCACCAGATAAGACTCAGCGGATTTGATGAGAGCTATAACCTTAATATCGGGC ATGGTTCAATATCATTGATGGCTCTATTTCCATCTTATAGGTTAAAGAAATCCGAAATTAAGGGGTTTGAACC AGGTTATTTCAAGCGGATGATTTAAGGTTACTAATATTACTGACAGCTCAATCAGGAAGAGTGGGCGGTTAT TGAATGTGATATGACGCTCTAACGGGACTTAAAGGGCAATTAAGAGATTATATTGATTGTTGGATTCTTTTGC TAAGGGTTTGATAGAAATCCACTAATCGGATTTAGCTCAAGCGCGAGTCAATATTGAGGGCGAGCGGTTGAGT TTAATAGCGATGAAGCCTTTAAAGACACTAATAATCAAAACGGCTCGTTGACTTAATCGCTTACAACACCG ATGGTAAAGAAATCGCTAGAAAACCATTTGCTATCACGCCCATTAACACCATGAACGATATTATCCAAAGCCATTAAAG CTAACACTGATGACAATCAGGACATAACACCGAAAC	2772	WKELSKNAKDSAQKQALAQKTEALTH NIKDTRERLTTLQHKASEELKSVKEVN SLGSQIAEINKRIKEVE'NKNLKHANEL RDKRDELEFHLRELLG'GNVFKSSIKTH SLTDKDSADFDESYNL'NIGHGFNIIDGS IFHPLVKESENKGLNQVYFQSDDFK VTNITDKLNQGRVGALL'NVYNDGNGT LKGLQDYIDLDSFAKGLIESTNAIYA QSASHYIEGEPVEFNS'DEAFKDTNINI KNGSFDLIA'YNTDGEIARKTIAITPTT MNDIIQAINANTDDNQDNNNTEN
HP1286	2773	CTCTGAGGGGACTTATGGCTTTATTTCAAGCGTGGAAATAGATGCGTGAAAGACTACGCTTATAAACTTGCGCGTT ATTGTTTATGAAAATTTAGAGCGATGTGCCAAAGCCGCTCAAAATCTAGCCGCTTAAAGCCAAACAACTGAAT GATTTCTCAGCAGAGCTTATGGATTATCGGTGCTTAAAGCGTGAAAGGTTTGAGGGCATGCTAGCGTGTTT TAGAAATCAAGAGCCCTAACGCATGCTTACTCATTCAAGCGAAAGCGATGATGCTTTTAAATTTAGAAAACAGCATGC AAACGATTTTAAACGCTTGAGTGGATACCGGCTGTTTATAGATTCTCAATCAGCAGTATCCTAGTATTATCAATC GTGGTGGAGATCAGAAAGGCAATTTCCCTATCGCAGCGTCAAAAGAAAAGCCAAAGCTCTGTGATCATTGAAG ACATCTGCTTCAGTCAAGAGGATTTGTAGAGGGGCAAAAGCGATTGAAGGGCTTTJAAAAAACATGGCTTTAAG GATAATGGCATTATTTTGGGCATGCGTTAAGCGGGAAATTTGCAATTTGCTGTTACGCCGATTTTAGAAAATGAAGCT GAAAGAAAGCGTTTGAAATTTAGTTCTGAGATGTTTTAATGGTGAGCAAAAGCTCTGGCTCTATTAAAGCCGAA CATGGCACAGGCGGATGGTAGCCCTTTTGTGGAATGGAGTGGGAGAAAAGCGCTACAAAATCCACAAAGCAAA TCAAAGAAATGTTGATCCTAACGGCATTTTAAACCTGATGATCATCACAAACGA	2774	SEGLGFSSVELECVK'DYAYKTCALLF YENLERCAKAAQILAAI.KAKQPEMISSA ELMDYACLKSVKGLGEMPSVWLEKEP NACLLIQSESDDPILLENMQTILNALS AIPVWLDQISSDPSYQSWWKIRKGF PIAASKRKSQSSVIEDICFSQEDFVEG AKAIEGLKKHGFKN'GIIFGHALSGL HFVVTPILENEAERKAFENLVSEMFLM VSKSSGSIKAEHGTGRMVAPFVEMEW GEKAYKIKHKIKELFDP'NGILNPDVITN

[illegible]

HP1411	2785	CAGTCAATGAAACAAAAATAATTGTAGAAGTGGGATTGATTCTTCTATTGAAGAGAGCTATTTAGCTTATTCATGA GCGTGATCATAGGGCGGCTTTACCGGACGCTAGAGATGGCTTAAAGCCCGTGCATAGGCGTATTTTGTATGCGAT GCATGAATTAGGCCCTTACTTCAAAAGTCGCTTACAAAAAGCGCTAGGATCGTGGTGATGTGATTGGTAAATACC ACCCCATGGCGATAATCGGTTTATGATCGCTAGTGAGAAAGCGCAAGATTTTCCATGCGTTTGAATTAGTG GATGGCAGGGCAACTTTGGCTCTATTGATGGCGATAACGCCGCGAGCGATGCGTTACACTGAAGCCAGAAATGACTA AGCGAGTGAAGAAATTTAAGGGATATTGATAAAGACACCACTTGTGCTTAATTATGACGATACCTTAAAG AGCCAGATATTTACCAAGCGCTGCTGCCTAACCTTTAGTCAATGGGCTAATGGGATCGCTGTTGGGATGCGGACT TCTATCCCCCTCACAGGATGGATGAATCATAGACGCTTTAGTGCATGTCTTAGAAAAACCCTAACGCTGGATTAGAT GAAATCTTAGAATTTGTCAAAGGGCTGATTTTCCCACTGGTGGATCATTTATGGCAAGCGGTTATTATTGAAGC CTATAAACGGGGAGGACGCGTGAAAGTGGGGCCAAAGTGCAATGTGGAAAAACAAAAATAAGAAATCATC GTTTTAGATGAAATGCCCTTTCAAACCAATAAAGCCAAATTAGTGGAAACAAATCAGCGATTTAGCGCGAGAAAAAGCAA ATTGAAGGCATTAGTGAAGTGGCGGATGAGAGCGATAGAGAGGCGATTAGAGTGGTGAATTGAATTAAAAAGAGACG CGATGAGTGAATTTGCTTAAACCACCTCTACAAACTCACCACATATGGAACCACTTTTAGCATCATTTTACTCGCTAT TTACAATAAGAGCCTAAGAT	2786	VNETKNIVEVGIDSSIEE:SYLAYSMSVII GRALPDARDGLKPVHFRILYAMHELGL TSKVAYKKSARIVGDVIGKYHPHGDNA VYDALVRMAQDFSMRI.ELVDGQGNFG SIDGDNAAMRYTEARMTKASEEILRDI DKDTIDFVPNYDDTLKEPDLPSRLPNL LVNGANGIAVGMAATSI'PHRMDEIDAL VHVLEPNAGLDEILEFVKGPDPFTGGI IYKAGIEAYKTGRGVKVRKVVHVEK TKNKEIIVDEMPFQTNKAKLVEQISDL AREKQIEGISEVRDESDREGIRVWIELK RDAMSEIVLNHLYKLTMTTETFSILLAI YNKEPKIFTLLELLHLFLNHRKTIIRRTIF ELEKAKARAHILEGYL/ALDNIDEIVRLIK TSQSPAANKNALMERFTLSEIQSKAILE MRLQRLTGLERDKIKEIYQNLLELIDDL NGILKSEDRLNGWVKTE:LEVKEQFSS PRRTEIQESYENIDIEDLIANEPMVVM SYKGYVVRVDLKAYEKQNRGGGKGLS GSTYEDDFIENFFVANTHDILLFITNKG QLYHLKVYKIPEASRIAIGKAIVNLISLA PDEKIMATLSTKDFSDERSLAFFTKNG VVKRTNLSEFESNRSCGIRAINVLDEGD ELVSAKVVDKNAKHLLIAHLGIFIKFPL EEVREIGRTTRGVIGIKLNENDFVVGAV VISDDGNKLLSVSENGLGKQTLAEAYR		VNLVSQNGRRYLKASISLELSNEKLLN EVKVKDTAIDKTHIEILSSKSVEEVVTK GKNKLKDEIKSHLNSFLIDGFIKNVFFT DFIIQ
HP1411	2787	GGTGAATCTGGTCTCAAATGGCAGACGCTACCTTAAGGCTTCTATTTCGTAGAAATGAGTAATGAAAAGCCTTT GAATGAAGTCAAGGTTAAAGACACAGCGATTAAAGACACGATTATAGAGATTCTGCTCTAAAGCGTGAAGAAG TGTTACTAACAAAGGCAAAACAGCTTAAAGATGAGATTAGAGCCATTGAATTCGTTTTGATTGATGGCTTTAT TAAAAATGCTCTTTCACTGATTTTCAATATCCCAATAATTTAAATGATTGGCATAGATATTGCTCTATTGCTAGGATAG AAAAGTGGTGAAACGCTTTAAATGAAGTTTATAGAGCGTTTTTATCGCCAAAGCGAGATTGTTTTATGCAAGGATA AATCCAGCAGTATCGCCGGTTTTTCGCGCTTAAAGAGGCTTGTCTAAAGCCCTTCAAGTGGCGATTGTTGTAAGGAA TTGAGCTTTTGGATATAAAATCTCTAAAGCCCTAAAGGCGCCCTTAAATCACCTTTCCAAAGAAAATGGATT ATTTCAATATCCAAAGCTTGAGCGCGAGCATCAGCCATGACGCTGGTTTTGCGATAGCGGTGCTGGTGGTTCTTCG TCAAATGAATAAATAACGCATTCTAAACTAACATTCTGTTTTAAAAAGGCGCTTAACGGCTGTTTAAAAAACGCAAAA ACTTTTTCAAATGGTTTTGATAACAAATTGCAATAATAATAAATCAAACTTCAAAATTTAAGTTAATTTTAATAATTATT TTTATAGTATGCATCGGTTTGAATTAATGAGAAAGGTTATCAC	2788			
HP1411	2789	ACGCTTAATGAGCTTGGAGCGCCAGAAATCATTTGCGCAATGAAAAAGGATGTTGCAAGAGCGGTGATGTG CTTTTGTATAACGGCGCAGCACTAATCGGTTAAAGGGCTAACAAACGCCCTTTAAATCGCTCAGTGAAATCAT TAAAGGCAAGCAGGGCGGTTTCAGGCAAAACCTTTTAGTAAGCGGTGATTTCAGGCGAGAAAGCGTATTGTG GTTGGCCTAATCTCAAATGGATGAATCGGGTTGCTTAAACATGCGGTTAGAACTCTTCAAAACCGCATTTGTTA TCCAAAGCTTGAAGAGAGAGGCTATGCCACCACGCTCAACAGGCTAAACGCATGATTGAGCAAAAAGCAATGAAGT ATGGAGTGTCTTGCAAGAAATCACAGAGGGGTATCCGGTGCTACTCAACCGCTCTACCTTGACAAAAAGCAATCC ATTCAAGCGTTCCATCCAAAGCTGATTGACGGCAAGCGATCCAATTGCACCCGTTAGTGTGTTCAGCGTTCAACGC CGATTTTGACGGGGACCAATGGCGGTGCATGTGCCTTTAAGCCAGGAAGCGATCGCTGAATGCAAGGTGCTGATG CTAAGCTCTATGAATATCCTTTTGCCTGCTAGCGGTAAAGCCGTAGCCATTCTAGCCAAAGATATGGTT	2790	RLMELGAPEIIVRNEKRMILQEAVDVL DNGRSTNAVKGANKRPLKSLSEIKGK QGRFRQNLGKRVDFSGRSVIVVGN LKMDECGLPKNMALEL'KPHLLSKLEE RGYATTLKQAKRMIEQIKSNEVWECLQ EITEGYPVLLNRAPTLHKQSIQAFHPKL DGKAIQLHPLVCSAFNADFDDGQMAV HVPLSQEAIAECKVLMSSMILLPASG KAVAIPSDQMV		

HP1411	2791	GGGTGTTGAATTGGATTAGGAGTGTAATAATGCAAGTTTCACAATATCTGTATCAAAATGTGCAATCTATTTGGGG GGATTGATTTCCCATCCGTTTCGTTCAAGGCATAGGCGTGGGACTTTAGAAAGAGATAAATTCGTTTTATATCAT TCAGGATTATTTGTTCCCTTTAGAAATACGCTAAGGTGTTGCTTTGGCGTAGTTAAAGCTTGATGAGCGGCTGAT GAGGAGTTTCTAATGCTATACAAGATATTTAAATAACGAGATGAGTATCCATACCAATACATTAGAGGACTTCAA ATCACTCAAAAAGAAATGCAAAACGCGCCCACTCTAGCGAATAATCCTATACAAGCTACATGCTCGCTGAAGG GTTAAGGGCTCTATCAAGAAGTTGCGGCGCTGTTCTATCCTGTGTTGGAGCTATTTAGTGATCGCGCAAAAT TAAGCCAAATCCCAACGCTTTAGAACATGCCCTTTATGGCATTTGATTAGGGCTATAGTTCCAAAGAAATTTCAAG CGTGGTAATTTGGAATATTAAATTTGCTTATCCCTCACTCTCACTTCTTCAAAACAAGAAATTTGAAAGAAATTTAAAGGA CATTTTATCACTACAAGCGAATACGAATATCTGTTTGGGATATGGGATCAAAAGTTGAATAAAAGTTTTTGCTG TTAGAAAACGCAAGAGAGAAGATATCTATCTCTGCAAAACGATTATTGGCGTAAGCTTCTAGTTGAGCTCAAT CTTTACCTCATCTCCACGACGATCGCTAAAGGTTTACCGATACCAAAATCCTTGGGTTGATTTGCTTCAGC TTGTAACACCATGAATCTTTTATCATGGGTTTGTAAAGGGCTTGGATTTGGCTTCCAATACGACAGGCTT GGTTACGCCACGAAGATCAATCCCCATAGATTTTACCATCTTCTGATTTTGGTCAATTTAAAGCTCCCTTTGGGTA TTTTACCAC	2792	RVELDFRSVKMQVSQYLYQNVQSIWG DCISHPFVQIGRGTGLERDKFRFYIQD YLFLEYAKVFALGVVKACDEAVMREF SNAIQDILNEMSIHNYIRGLQITQKEL QNARPTLANKSYTSYMLAEGFKSKE VAAVLSGWSYLVIAQNLSQLPNALE HAFYGHWIKGYSSKEFQACVNWNLNLL DSLTLTSSKQIEIKLKDIFITSEYEYLF WDMAYQS
HP1411	2793	GGCATCTTAAAGGTGTGAGAAATCAAAAGCGCACTACCTTTGGGATCATCTCAGCCTTTAAACCCCTTTAAAG ACGCTTTTACAGAGATTCAATCAATAGCAAAAGTTACTGATAGGGCAGCTAAAGCGGTTGCAATTCATCTA GGCTGATAAAGTGGCTCAGTTAAACACGCTTACTCTAGCAAGACAATCTGTTAAAGTGGATTGGGATAAA CCCATTTAATCAAGGACTCTTTAAAGGCAATAATACCTTTATAGGAGTTTGTATTTATGGGGAAGCATTTTAT GGACAGATTTTAAAGAAATACGCTAAGCGAGCGTGAAGACITTTATGCTAGTAAGGAGTTTGTGCTAAATACC GATACACCCCAAGCAAAATACAGAAAGAGCGAAAGCTGCAATCTGATTTAGAGAAATAGCGGATTTTATAGGG TTGTTCAAGCGCTTAACCTCTTAAAGACAAACCGCAAGATCCTTTTACCCTAAGAAACGAGCTTTTGTGCTG TCGCTAATGAGCCTACTATCGTTTAAATTAAGGATTTATTTAGGCTTACCGCAATCTTTAACCAACAAGCGAT CTGTTATTGTGAAGCAATGCCCTATAGAATTGATCAACGCTTCAACCGGTAAGGACTTTAACCAAGACACAAGACA GCTTCCACACATCAATCTCAACACCAATCAGTTAGAACCAATCCCTCAACGCTCTTAAACCAAGCTAGCCGCAT TCTTTTCAAAACACCTGATAAACATACGGCATGGAGTTTAAATGAATAGCTAAACTCAATAGA	2794	DLKVCCEKIKSALPFGIISAFKPFKDAFY RDFNHNEQKLLIGAAGKSGCIQSSADKL AQLKTRLLYWQDKSVKVDWDKPIKID FFKGNNLYRRFCFLGKHFMDFLKN NAKASVKDFMSSKEFVAKYRYTPKQN TERAKKLQSYLENKRDFIGFVQALNSL KDNPDPLPNEETSFLVFANEPTIVF NLRDYLLVLAQIFNQQAICYCESKPIE LINASPGKDFNKTQDSFPDIKFSTPNQL EQSLNALKNKLAFFFSKHPDKHNGME FNEIAKTIQI
HP1411	2795	TGCTGCTTTGCGCTGGAAGGAATGAGACTTTAAAAAAGCGGTGCTTATGGTGGGTTGATAGAGAGCGCGATT AATCTAACGAGAAATGTTTAAAAAACCCCTGATACAGAAAGCCTTATTTATAGGAGCGCGGAGTTATAGCCCA GAAATGGAGCTTTAAGCGTGTGAAAGCTTTGCGGCTATCAATTTGAAGAGAGTTTAGCCATTTAAACAGCTAC ACGCTTTGGATAATTTCAATCAGATAGAACTGAAGAGCAGGCTCTTTTGAAGGGTGGTGTGAATAGCAGTAAC TATATCCACACGCGAAATGTTCCGCTAAAAAATGTTTCAAGGCGCTTTATAGAAACATGGAGTTTGTAGC GTTTAAAGCGTGAAGCTTTTCTTTAAAGGCTAAAGGATTTTTCGCTGAGTAATTTATGTTGGGCTTAATGCG TATCAGGAATTTAAGAAACACCGCCAAAGTCAAAACAGATTTAGAAACATCATTTAGATGTTAATAATTAATAGT TTAGCTATCATGGAGCAATCTAAATTAAGGCGATCACATGTTTGAAGAAATACCGAAGATTTAGCGGATATTGAAG ATTGCAAAATGAAATGAAATGCTTTTAAATTAAGCAATTTGAGTTTGGGATTTTATGAGATTAAAGAGGGA GCATGGACATGCCAAAGGCGTGAATGAAGCGTTTTCGCAATTAAGCGAAGAGTGGAGCGGATTGAAGGAGCT TATTAAGCGCTTTGAATAAAATCAAAAAGGTTATTTGGTGTTTTAAATGTGTTGGGATTTAGGTTATAGGGGATAG CGAGAAAAATCCGTTCTTTTAGAGGGATTAAAGGAATTTGAATACAGAGTTATGACAGCGCGGTTTAGCCGTAT TGAGTAATGATCGTTTGGAGTGTTTAAACTCAAGGGAATTAGAAACCTTAAACTAGAGCTTAAAAATAAAGAGTT TTGGATTG	2796	LLCAGRNETLKKAVPIGVGLIESAINLTR MCLKNPDTESLIFIGSAGSYSPHEMELLS VFESVCGYQIEESFSLNSYTPLDNFIH IETEEQALFERVRVNSSNYIHTSEMFAK KMWQKGVLENMEFFSVLSVAKAFSLK AKGIFCVSNVYVGLNAYQEFKENHAKVK QILENIIDSLI
HP0935	2797	GATCATCAAGCGGGTTCATTGCGTTGAGTCAATGGGTGACGCGAAGCTTCTATCCCTACCCCAACACCGATT ATTACAGAGAAATGTTGCTCATCATGTGTAAGCCAAATACGATGCAACATCCTTTTGTGCTCAAGCGGCTTATG ACAAAGGCTTAAAGAAATTTAGGCTTGAAGAGCAAGTGTGCGGTAAATAATTCAGAAACATCACTAAAAA GACATGCAATTCACGACACTACCGCTCACATTGAAGTCAATCTGAAACTTACCATGTGTTGCTGGATGGCAAGA AGTAACTTCTAAACCGCCCAATAAAGTGAGCTTGGCGCAACTCTTAGCATTTTCTAGGATTTTAGGAGCAACGCT CCTTAAATCC	2798	IIKGGFIALSQMGDANASIPTQPVYYR EMFAHHGKAKYDANITFVSQAAYDKGI KEELGLERQVLPVKNCRNITKKDMQFN DTTAHIEVNPETYHVFDGKEVTSKPA NKVSLAQLFSIF

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HP0935	2799	GCGGACTAATAAGCCTTGATCAATTCATTTGAGATAGCTCAAAAAGACAATTTGCTTCAGCGTATCTAACAGTC AAATTAGAATACCCACAAAGACAGAGTCTCTAGCGTTATTGAAGAGAGTTAAAAAGAGAGAGAAAGCAAGCAAGAG GCAGAAAGAAATTGATTAGCAAGAAATCTTAACACACAGCCTACATCAATAGATGATGATGGCGAGCAATGAAC AGATTATCAACAAGAAATAGAGAAAGCAAAAATTTATCTTAGATCAAGCAAGGCGCTAGAGACTCAAT ATGTGCATAATGCCCTTAAAGAAACCCGCTGCTAGAACTACAACCTACTACCAAGCGCTGAAACGCTCTCTAA CATATTATGCCCTCTGAAATTTTGATGATGGCAGATTCACCTATTTGTTTCAAAAACATCACTCTCCAACTGCTA TTTTTGTTGTTCAACCTGATGGGAAATTGAGCATGACTGATGCCCTTGAAGCAAGCCCTTGTAAAGTAAATCAAGGATTGA GATGATAGAGTTAATGAATTCAGAAATTAAGCTCATTAAAGCAAGCCCTTGTAAAGTAAATCAAGGATTGA GCTATGGGAAATCCATTGACAAAAATTAACAATCAAAACTATGGTGAATGGAGCGTGTGATTAAAGGCTCC CTCTTGTGAGAGATAATAAAGGCGTTAAGACATGAATGAAGAAACGATAAATGAACTTCTAAAGGAGCCCA ACAAGATTCACCCCAAGATTTATCCAATGAAGAAGCAAGCAAGCAATCTTTTGAAGTCTTTTAAAGAAATCCAAA GAAA	2800	RTNKALYQFILIAQKDN:ASAYLTVKL EYPQRHEVSSVIEEELKKREEAKRQKE LIKQENLNTTAYINRVMMASNEQIINKE KIREEKOKIILDQAKALETQYVHNALKR NPVPRNYNYQAPEKRSKHIMPSEIFD DGTFTYFGFKNITLQPAII=VWQPDGKLS MTDAADPNMNTNSGLRW/YRVNEIAEF KLIKDKALVTVINKGYGKNPLTKNYNIK NYGELERVIKKLPVDRK
HP0935	2801	ACGAAGGCACATAAGAGCTTGGTGGGGTGGGTTGCGCAACTTTTAGAGCAAAAAGCGATCAGTTGAATGTGGA TACCAGCACAGAGATTGCAAAATCACCTTAGAATTTTAAAGAAATACGAAGATGAAGCCATTACGCGCTTAAAGA GCTTTTAAATCCCTAATTCACGCAAAACGCTTAGAAAAAGTCAAAACCCAAATGTTAGCGGCACCTTTACAAAA GAAAGCGATTTGACTATTTGGCTAAATTGACTTTAAGCAAGAGCTTTTGTCTAACACCCCTTAGCTAACGCGAGCC TTAGGCACATAAGAGAGCATTCAAAAATCAAGCTAGACGATTTGAACAGCAATTTGCTAAGGCTTTTGAACCTCAAT AAGCTCGTGGTGGTGGTGGGCGATTGAAAATCGATCAACCCCTTAAGCGTTTGAATAACGCCCTTAATTTCTT GCCACAAGGTAAAGCGTATGAAGAGCCTTATTTGAACGAGCGATAAAAAGCGAAAAAGTCCCTCTATAAAGACA CTGAGCAGGCTTCGTGATTTTGGTGGGGTGGTGGTCTCGCTCTGTTTAAATCAAGGATTTAAACAGGATTTAGCGAAATCTAAAGTCA TGATGTTGTGCTTGGTGGGGTGGTGGTCTCGCTCTGTTTAAATGGAATAATCAGGTTCAAGAGGGATTAGCTTATAGC GTGTATATCCGCTCAATTTTCTAAAGTGGCGCATTTTGGAGCGGTTTGCACCAAGCTCAGCAGCTCAAACT AAAGCGTGGCTTAGTAAAAAATCGTTAAGGAATTTAGAAAAAGGATGACGCAAGCAATTAGACGACGCT AAAAAGTTTTTACTAGGCTCTGAGCCTTTAAGGAAATGAACGATCTCTAGCCGCTTGAACACCACTTACAATTTT ATTAGGTTTGGCTTTAAATTTAACCAACGCTGCTCAATCAATCCAAAAATGAGTTTGAAGAAATCAATGATTT CATTAAAGCCCA	2802	EGTKELGAVGFAQLLECKAISLNVDT TEDLQITLEFLKEYEDEAITRLKELLKSP NFTQNALEKVKTKQMLA/LLQKESDFDY LAKLTLKQELFANTPLANAALGTKEISQ KIKDDLKQQFAKVFELNKLWVVGDD LKIDQTLKRLNNALNLFQGGKAYEOPY FETSDKKSEKVL YKDEQAQFVYFGAPF KIKDLKQDLAKSKVMMFVLGGGFSRL MEKIRVQEGLAYSVYIRSNFSKVAHFA SGYLQTKLSTQTKSVALVKIVKEFIEK GMTQQELDDAKKFLLGSEPLRNETISS RLNTTYNYFYLGPLNFVQTLNLIQIK MSLKEINDFIKAHTEINDLTFIVSNKKK DK
HP1530	2803	CGTGGTTTATCCCGCCTAAAGACTTGTAAAGCAATTAGAAAAAATCAGCGCTTCTTTCTAAAGACATCGTAATA GCGATAAAGCAAGTAGAAAAATTAGAGCTTAGCTATGCGCTAATAGACAATATCCAAACACAAACACGCTTGATGACAC GCTTGATTTTACCTTTATTGTTGGGATTCTTTGAGCGTTGAGTCTGATCTGGTGTGATGACATG GATAGGCCTATGAGCGAGCAGTTCTCTCAACCATATTGGGGAATTGG	2804	RGFIPPKDLLKQLEKISASLSKDVIKQ VEKLELSYALIDNIQHNTLDDTLDTFIV GDSLSVQSLYVTFDLVIMDRPMSEQF LNHIGEL

HP0797	2805	JATAATTTAGGGAATGCAACAACACCACTTTACTATTACGACAAGAGCATTGATTTTTATGCGAGCGGGAACACTCTAT TCACTAAAGCGGAATTTCTCAACACTTACCGGGCAAAACAGCGGATCGTTTTTGGGGCTAAAGCATATGAGCG AGCTTAAGCGATGCACCGCAGTCTAACACCATCATTCGCTTTGGGACAATAAGGAGCAGGAGTAATGATCGGA GCGGCATTGCTGGAATTTGCAATGCATAGGCTTTATTACAGGGCATTATGAAGCGCAAAAGATTTACATCACCGGT AGCATTGAAGCGGAATCGCATTTCTAGCGGTGGGGCGCGAGCCTTAATTTAACGGGCTTCAAGGCATTCTTTT AACGAACGCGACTTTGTATAACCGCGCGCTGGCACGCAAGCTCGTCTATGAATTTATCTCTAACAGCGCGGAACA TTGAGGCTCAAAACTCCTATTTATAGACGATACCGCACAAAATGGCGTAACCTAAATTCAGTTTCAACGCTTTGA ATCTGGATTTTCTAACAGCTCTTTAGAGGCTATGTGGGAAACGCAATCTGTTTTTAATTCATGCGCAAGAATG CGATCAGTTTACCAACAGCAGCAATTTAAGCTCTGTTTGTATCAAAATGCAAGCTAAAGCGGTGTTGTTTGACAAT CCAAITTAAGCGTTTCAGTGGGACAAGCAGTATTAAGCCAAATGCGATCAATCTTCTCAAAATGCCCTCTATTATG CGAGCAACCATTAACCTTAGAACTTCAAGGCGATTTGAATGTGAACGACACCGCTCGCTCAACCTCAACCAAGC ACGATTAATGTTTCCAATAACGCCACGATCAACGATTATGCGAGCTTGATGCGAGTAATGGCTCTCACCTTAATTT AACGGGCGGTTAATTTCAATTCAGCGGAATATTACTACGAGTTGAATAATTCCTCTATCTGTTTAAAGGGGCGGTC TCTTTAGGAGGCGCAGTT	2806	NLGNANNTIYYDKSIDFYASGKTLTK AEFSQTFTGQNSAIVFGAKSIWTSLS APQSNTHIRFGDNKGAGSNDASGHCHW NLQCIGFITGHYEAQKIYITGSIESGNRI SSGGASLNFENGLQGILLTNATLYNRA AGTQSSSMNFISANSANIQAQNSYFIDD TAQNGGNPNFNSNALNLDNSNSFRG YVGKTQSVKFNKNAKNAISFTNSTNLSS GLYQMAKSVLFDNSNLVS SVGTSSIK ANAINLSQNASINASNSHSTLELQGDIN VNDTSSLNLQSTINVSNNATINDYASL IASNGSHLNFNGAVNFNSANITTSLN SSIVFKGAVSLGGQFNLSNNSSLDFQG SSAITSNTAFNYDNAFQSQSPITFHQAL DIKAPLSLGGNLLNPNNSVLDLKNSSQ LVFGDQGSNLNIANIDLLSDLNDKNRV YNIQADMNSNWYERISFFGMHINDGIY DAKNQTYSTNPLNNAKITESFKDNQ LSVTLSPQIGIKNTLYNIGSEIF
HP0797	2807	GCGCTGATCGCACCGAGAGTGGAATTCACGCTAAAAATATCTTAATTGATAATTTTTAGAAATCAATAATCGTGT GGGTTCTGGAGCCGGGAGGAAGCCAGCTACGGTTTAACTTTGCAAGCTTCAGAAGGGATTACTAGCAGTAAA AATGCGGAAATTTCTCTTATGATGGCGCCACGCTCAATTTGGCTTCAACACGCTTAAATTAATGGGTAATGTGTGG ATGGGCCGTTTGCAATATGTGGGAGCGTATTTGGCCCCCTTCATACAGCAGATAAACACTTCAAAAGTGACAGGGGA AGTGAATTTTAAACCATCTCACTGTGGCGATCACACGCGCTCAAGCAGGCAATTCGCTAGTAACAAGACTCATA TTGGCACACTGGATTTGTGGCAAGCGCGGACTAAACATTATCGCCCTCCAGAAGCGGTTATAAGGATAAACCT AAGGATAAACCTAGTAACACACGCAAAATAATGCTAACAAACAAACAGCGCTCAAAACAATAGTAACACT CAGGTTATTAAACCCACCAATAGCGCGCAAAACAGAAATTCACCCACGCAAGTCATTGATGGCCCTTTTGCTGG TGGAAGACACGCGTTGTCAATATTGATCGCATCAACACTAACCTGATGGCAGGATTAAAGTGGAGGGTATAAAG CTTCTCTTACCACCAATGCGGCTCATTTGCATATCGGCAAGCGGCTATCAATCTGTCCATCAAGCGAGCGGCGC ACCCTTTGTAGTGAAATCTAACCGGGAATATCACCGTTGATGGCCTTTAAGAGTGAATAATCAAGTGGTGGTTAT GCTTGGCAGGATCAAGCGCGAATTTGAGTTTAAAGCTGGTACGGATAACCAAAACGCGCACAGCCACTTTTAAATAA CGATATTAGTTTGGGAAGATTGTGTAATTTAAAGTGGATGCTCATACAGCTAATTTTAAAGGTATTGATACTGGTAAT GGTGGTTTCAACACCTT	2808	ADRTTRVDENAKNILIDNLFLEINNVRGS GAGRKASSTVLTQASEGITSSKNAEIS LYDGATLNLASNSVKLMGNVWMGRLO YVGAYLAPSYSTINTSKVTGEVNFNHL TVGDHNAQAAGIAHNSKTHIGTLDLWQ SAGLNIAPPEGGYKDKPKDKPSNTTQ NNANNQNSAQNNNSNTQVINPPNSA QKTEIPTQVIDGPFAGGKDTVNIDRI NTNADGTIKVGGYKASLTNAAHLHIG KGGINLSQAASGRTLLVENLTGNITVD GPLRVNNQVGGYALAGSSANFEFKAG TDTKNGTATFNNDISLGRFVNLKVDAH TANFKGIDTNGGFFNTLDFSGVTGKVN INKLITASTNVAVKNFNINELVKTNGV SVGEYTHFSEDIGSQSRINTVRLETGT RSIFSGGVKFKSGEKLVIDEFYYSPPWN YFDARNIKNVEITRKFASSSTPENPWGT SKLMFNFLTQONAVMDYSQFSNLTIQ GDFINNQGTINYLVRGGQVATLNVGNA AAMFFSNVDSATGFYQPLMKNSAQ DLKNKEHVLLKAKIIGYGNVSLGTNSIS NVNLIEQFKERLALYNNNNRMDICVVR NTDDIKAQCGTAIGNQSMVNNPDN

HP0797	2809	AAGTTTGGTAAAGCTTTTGGTGTGCTGAAACGCTCATGAGCCAGAGAAATCAAGGCTAAAGTGGCTTATGTGAA AATCCCCCAATTAGAGATTGGGAAACAACCCGGTTATATCGGTCAAAATATAGGCGTAACCTTATGATTTATGCTG TTTGACGCTGAGTTTGGAGCCAAATCAAGACGGTTGGATAAAACCCAAATGAGCTTTTAAACAAGATGCCT AAATGGAAAAGGTGGAAGAGCTTTTCAGAGCGACTTATTATTAAGAGATTAAAGGCATAAAGCGATTATTCCG TCCTTAGAAGTGAGCGCTTTTCCAAATAAGAGCAATACATAGATCATTCATAGCCCCAAAGTTACTTTGCAGGTA ACGGATTGTCCAAAACCCCTCGTTATGCGAATGTGCTAAGATTACAACTTTCGCAATACAAACCAAGAT TATGACGATAAAACAATAATTTGGTGATGGAATAGCGTTCAAGAGCCACTTGGGAAGATTTCACATCAAGAA GCGATCAAGCAAGGTTTATAACGCTCTTTAAACCCAGATCAAGGCTAAAGAGGAGCGTTTATTATTGCGT GTTGCCCTAAGACTATTCAAAACCTTTCTTTGATTATTC	2810	SFLVSLVAENAHPEEIKAKVAVVKIP QLEDLENNPVYIGIIGVTYDILLFDAE FLEAKIKDGLDKTQIELLNKMPKWKKV EKELFRATYYKIKGKAIIFSLEVSASF NKDKYIDHSIAPKVTLQVTDLSKNPRYA NVMAKDLQVLQYKTKDYDDKNLILVM EIAFKEATWEDFHIKEAIKCGFDNASLN QIKAEGSVFYCYVLPKTIQNLSDYF
HP0933	2811	ATGCCCATGGTGTGAGTAATGGTGTGAGGCAATGTGGCGGTGGCAATAGTTATGGCGCGGAATAGATAAAGGC GACGGGAGCGCATGCGGGATTTTTAAATGAATCAAGCGGATTCAAGACATGATCAAAAACGCTGAATAGCCGT AGAGCAATCCAAATCGTTACCGCCAAACGCGCAACACAGCAACCTAGACACTGGGAAAGCAATCAACCCCTATA AAGACGCCAACTCGCCCAAGCATGTTCCGTAACGCTAGAGCGCAAGCGGAGATTTTAAACCGCTCAAGCAGT GGTGAAGGACTTTGAAGAAATCCCTGACGCTTCTGTAAGACTCTTTAGGAGTATGCCATGAAAGGGTAGCGAC GGCAATCTCGGTGACGCCATCTGGCAGGTTACTTCAACACTTGGGAGCGGCTGCGGTATGTGGGAGAA ACCGTAACGAATCAAAAACAGCATCGCTCATTTTGGCGAACCAAGCGGAGCGAATCCATAATGCGCGAAATCTCGC CTACACTTTAGCGAATTCAGCGGCCAGTACAAAAGCTAGCGCAACACTATGACAGCATCACAGCGCGCTCTCTA GCTTGCTGATGCGCAATCTTTACAAATGTGGTGAGCAAAAGACTAACCTAACAGCGCGCAAGGCATACAGGAT AATTACT	2812	CPWLSNGGAGNVAGGNSLWAGIDKG DGSACGIFKNEISAIQDMIKNAEIAVEQ SKIVTANAQNHNLDTGKAFNPYKDNAN FAQSMFANARAAQAEILNRAQAVVKDFE RIPAAFKVDSLGVCHKEKESDGNLRGTP SGTTSNTWGAGCAYVGETVTNLKNS IAHFQDQAEIRIHARNLAYTLANFSGQ YKLGHEHYDSITAALSSLPDAQSLQNV VSKTNPNSPQGIQDNY
HP0933	2813	ATACGCGCAAGGCATTACCAACGAAGCGCTCAATTCAGGATTTATTAGATTGGTATTTACACCATATCGGTCTGTT TAACCCCTTATAAGCGCGAATCGCTGAACATGTTTTTAAACCACTCTGCTCATGATGCGATTATTATAAATTAAC TACCCGCCAACAAAGTATCATGTGTAATAGCTTTACAGAAATCGCTCATTTTATTGAAAACATTTATCAACAGG ATTAGATGATAAAGCATTGAAAATTAAGGGAGCAGTTAGGCTTTATTCAAAAGAGCGAGGATTTAGACGAGATA GCAAAATCATCAATCTTTATCGCTTTCAACGCTTAATGTTGCACTGCTGCGATGATTACGACATTAAAGAAA GAAGTTTCTTTCTTACCTTTATATCAATCAATCACTCAAAATCCCGATTCTACTACACTGAAATACATGATTTCTTTAGG CAAAATCAGAGAATTAGATGTTTACGAAATCTTGCTAAACTTTGCCCTACTTGTCATAGGGCTTTAAAAAAGGATCT AGCGAAGAGGAGTTTCAAAACGCTTGATTAGAAACATCTCA	2814	YAQGINQRNAQFRIYLDWYLLHIGLFN PYKARIAEHVFKTTLAHDGIYKLNYP TTYHGNSTFTECAHFYLNKYQDLD KSIEKLREQLGFIQKSEEFRRDSKINLY RLSTPNVCSACDDYDIKERSFLSLPL YQITQNPDSYYTEIHDFFRNCNRIRCF SKSC
HP0933	2815	CTTTGGCTTAGAGGTGATTAGGCATTGATCGCGCATTTGCTTGGCAAGCTTGAAAGCCCTTTATCCGGACGCG AAATTTTGTAGGCCCTGTGTAGAGAGGGGTTTATTAGATTCAAGACTTCTTCAAAATCAGCGAAGAGGAT TTGCTAAATTAAGCGGAAATGAAAGAGTTTGGAGTTGAACTCGCTATCACTAAAGAGACTTTAACCAGAGAG CAAGCTTTGAGCGTTTAAAGGCGATGAATTAAGCATGCGGTGATGAGTAAATCGGTGGCGATGCTTTGGCG TGATCAACAAGGCGAGTTGAAGATTGTGTAAGGGCGCATCTCCCAACACCCGTTTTTAAACCATTTTAAAGC TCACTAAACTGGCTGGGCTTATTTGGCGCGCATGAAACAAATGCTCATTAAGATCTATGGAATCGCTTT GCCACCAAGAGGGTTTAAAGACTATCTTTCCAAATAGAAAGCGGAAACGAGATCACAGAAAGCTAGCGGT GGAGCTAGGGCTTTTAGCTTTGATGATGAGATAGGGCGGCTTACCTTTATGGCTGCCCTAAAGGGCAAGGCTT AGGAAGCGCATTGAAGATTATTGAGTCAAGCGTTACTTTAAGAGGCTATGAGCGGTTAAAGGCTGAGATTTTA CTTATGGGGGAGTTGCCGCTGCGGAGCGTTTACGGGGAAGACCTAGCAAGTGGATAGGAGCGCG GCTTATGCGGCCGCTATGTGCTAAATAATTTGGTAGCGAGTGGGTTTCCGATAAGCGACCGTGCAGCTTGCTT ATGCGATTGGGTGATAGAGCCAGTGTCTATTATGTGAACACGCATAACAGAGCAAGTATTCAAGCGCTGAGTTG GAAAATGCGTGAAATCGGTTTCAAACTCACGCCAAAGGCATTATTGAAAGCTTGGATTATTAAAGACCCATTATT CGCTCACTCAGCTTATGGGCTTTTGGCGCGAATTAGAGGAATTCACCTGGGAAAAAACCAAGCTGAGGAG ATTAAAGCGTTCTTAAGCGTTAAAAAATATTAAAGGTAATTTTAAAAATTTTGTATAATCAACAATTCACAA GGAGTTAAATTGAACAACAAGACGCTGTCTATTATTAACCGGATGCACCTAAGAAAAAGTGTAGGCAAAATCAT TGATCGTTTGAAGAGTAACGGCTTGAAGTGGTGTGCTATGAAACCGCTTGCAATTTGAGCGTTAAAGACGCTGAAAACCT TTTATGCG	2816	LALEVRHSCAHLAQSLKA.YPDAKFF VGPVVEEGFYDFKTSKISEEDLPKIE AKMKEFAKLKAITKETLTREQALERFK GDELKHAVMSKIGGDAFGVYQQSEFE DLCKGPHLPNTRFLNHFKLTKLAGAYL GGDENNEMLIRYGFATKIEGLKDYL QIEEAKKRDHRKLGVELGLFSFDDDEIG AGLPLWLPKGARLRKRIEDILSQALL RGYEPVKGPAIL
HP0933	2817	GCTTATGCGGCCGCTATGTGCTAAATAATTTGGTAGCGAGTGGGTTTCCGATAAGCGACCGTGCAGCTTGCTT ATGCGATTGGGTGATAGAGCCAGTGTCTATTATGTGAACACGCATAACAGAGCAAGTATTCAAGCGCTGAGTTG GAAAATGCGTGAAATCGGTTTCAAACTCACGCCAAAGGCATTATTGAAAGCTTGGATTATTAAAGACCCATTATT CGCTCACTCAGCTTATGGGCTTTTGGCGCGAATTAGAGGAATTCACCTGGGAAAAAACCAAGCTGAGGAG ATTAAAGCGTTCTTAAGCGTTAAAAAATATTAAAGGTAATTTTAAAAATTTTGTATAATCAACAATTCACAA GGAGTTAAATTGAACAACAAGACGCTGTCTATTATTAACCGGATGCACCTAAGAAAAAGTGTAGGCAAAATCAT TGATCGTTTGAAGAGTAACGGCTTGAAGTGGTGTGCTATGAAACCGCTTGCAATTTGAGCGTTAAAGACGCTGAAAACCT TTTATGCG	2818	YGGSCPHGGGAFSGKDPISKVDRSAA YAARYVAKNLVAGVCDKATVQLAYAI GVIEPVSIVNTHNTSKYSSAELEKCVK SVFKLTPKGIESDLRLPIYSLTSAYGH FGRELEEFWEKTNKAEIEKAFKFR

HP0933	2819	GAGCGAGTGTGAGCGGTTACTTCTGTAGGCTTAGGGCAGCCCTAAACATTCAGTTTCAGCTAATGACAAA CGGATGCGAGGATAATTTAGTGAGCGTGATTGAAACACAGACCAATAAAAGGTGCGTATTTTAGAAATCAAAACCTTTA AAATCTAGCCAGGATTTAAATGATGCTGTTTGAAGATCCGACACATAAATACATATCCCGCTTGTGAGTAAG GATGGTAATTAATCATAGGCTTAGCAACATATCTTAGCAATAAAGCGATGATGCAATAGTTCAGAAACC AATCAAAAAGTCAAGCTCTTAACGCCACCCACCAATAAGCGGAATTGAACGCTATTTTAAATGAATACCGGCT GATTATGCGATAGATTGCCCTCTACTAACGCTGCAATAAGGATAAAATCCTTTATATTGCTCTGATCCCATGTGC CCACATTGCCAAAAGAGCTCACTAACTTAGGATCATTTAAAGAAACACCGTGAGAAATGGTGTGGTGGGCTG GCTTGGGTCATTCAGCTAAAGCGGCTTTAATCCAAGAAAGATGGC	2820	ASVLSALLVGLGAAPKHSVSANDKRM QDNLVSVIEKQTNKKVRILEIKPKSSQ DLKMWVEDPDTKYNIPLVSKDGNLIIG LSNIFFSNKSDDDVQLVAETNQKVQALN ATQNSAKLNAIFNEIPADYAIPLSTN AANKDKILYVSDPMCPCPHCKELTKLR DHLKENTVRMVVVGWLVGVSNAKKAAL IQEEM
HP0933	2821	ATGGCGGATTGCGCGGAATTTGTTGCATAAAATTCAGGGATCACGATAGATATTGGAGGGGTAGCACCGA GTGCGCGTTGATTGAAAGGCAAGATTAGGACTTAATCTCGCTGATGTTGGGACGATTCGCAATTAAGAAATGTT TTTAGACAAAGACTTAGAGGTCAATTTGGCTAAAGCCTTTATCCAAAAGAGTCTCTAACTGCCCTTTAAACACAA AAACGCCCTTTGGGTGGGGGACGATCAGAGCGTTGAGTAAGTATGATGAACGCTTTGTTACCTATTGATT CTTTGCATGGCTATGAATAGATGCACATAAAATTTAGGTTTATTGAAAATCGTCATGCTCAAGAGATCAATT ACGGCTTTAGGGTGAATGAAGAGCGTTTGGATAGCATCAGGAGCGGCTTATTCAGTCGTTTGGAG CATTTAAACCTCTTAATGATCACTAGTGGGTGGGTGAGAGAGCGGCTTTTGGAGCGATTTATTGCGCCA TCATTACCATAAATCCCGCCCAATATCAACCCCTCTCTCATCTTTAAAGATCGCTTTTGGCCCATGAAAAGCAC AGCCAAAGGTCAAAAAGATGCGTGAATTTGTTGAGCGCTTATCGCCTTTCATATAAATAGATGAAAATAC	2822	GGIACANLLHKNSGITIDIGGGSTECALI EKGKIKDLISLDVGTIRIKEMFLDKLEV KLAKAFIQKEVSKLPFKHKNAFGVGGTI RALSKVLMKRFYCYPIDSLHGYEIDAHK NLAFIEKIVMLKEDQLRLLGVNEERLDS IRSGALISWLEHLKTSMTSGVGV EGVFLSOLLRRHHYHKFPNPNPSLSLK DRFLPHEKHSQVKKECVKLFALSP HKIDEKY
HP0933	2823	CCCTGAGGATACTCCATAGATTTCTCTAGCGTAGCGCTGGAGAACTAATCTTGTGCGGACTAATAAG CCTTGATCAATTCATTTGAGATAGCTCAAAAAGACAAATTTGCTTCAGCGTATCTAACAGTCAAAATTAGAAATACCC ACAAAGACACGAGTCTCTAGCGTTATTGAAGAGGAGTTAAAGAGAGAGAAAGCAAGAGCGAGAAAGAAATTGA TTAAGCAAGAAATCTTAACACCACAGCTACATCAATAGATGATGCGGAGCAATGAACAGATTAACAACAAAG AAAAATAAGAGAAAGAAAGCAAAAATTTATCTTAGATCAAGCAAGCGCTAGAGACTCAATATGTGCATAATGCCT TAAAGAAACCCCGTGCCTAGAAACTACAACCTACTACCAAGCGCTGAAAACGCTTAACATATTATGCCCTCTG AAATTTTGTGATGGCACATTCATTTATTTGTTTCAAAAACATCACTCTCAACCTGCTAATTTTGTGTTCAACCT GATGGAAATGAGCATGACTGATGCCGCTTATGCTCAACATGACCAATTCAGGATGAGATGATAGAGTTAA TGAATTCAGAGAAATTTAAGCTCATTAAAGACAAAGCCCTTTGAACAGTAATCAATAAGGCTATGGGAAATCC ATTGACAAATAATTACAATATCAAAACTATGTTGAATGGAGCGTGTGATTAAAGCTCCCTCTTGTGAGAGATAA ATAAAAGGCGTTAAGACATGAATGAAGAAACGATAAATTTGAAACTTCTAAAGAGCCCAACAGATTACCCCAA GATTTATCCAATGAAGAAAGCAAGCAAGCAATCATT	2824	PEDNSIELSPSDSAWRTNLVVRTNKAL YQFILRAQKDNFASAYLTVKLEYPQRH EVSSVIEELKKREEAKRQKELIKQENL NTTAYINRVMMASNEQIINKEKIREEKQ KIILDOAKALETQYVHNALKRNPVPRNY NYYQAEKRSKHIMPSEIFDGDGFTTYF GFKNITLQPAIFVVPDQKLSMTDAID PNMTNSGLRWYRVNEIAEKFKLIKDKA LVTINKGYGKNPLTKNYNIKNYGELE VIKKLPLVRDK
HP0933	2825	AACAAAGAACCATGTTTATACGCTGTGTATAATGAACGTATAGAGAGTATAGTACCCCTTAAATGACAAAC TCAAGACACACCATTCATGGTCAAGTGAAGTTGCCAAATTACAAGGACTAATTTGTTGGATAATAAACAAGTTGTAC TAACTTTCAAACTTGTTCACCATTTCTAAAGATACGCTCATAGGCGATGCCAATAAGATACCTCAATACAGAATTA CTTCCAAGCTAATGGAGCGAGATCTGACATTTGATTTTACTTGAACCCACTTGAATCAAAAGGGTGTGATGAT AGCGAGTAACATAATCTTAACAGCAAGAAACCAACAGACCTTTGATGTTGCAAGGAGTCAAGCCAA TGCTAGGAGCTAACACAAAACTTGCATGGCTATGATGAGTGAGCAACCAACAGCAAGTCAATGAAGTG GCAAGAGAAAAGCTCAGCTAGAAAATCAATCAGTATTACAAACTCTTTTACAAGCAAGGAACAAAGATATACC ACTAGGAAAATAACCAACGAGAAATTTAGAAACATTTAGTAACTGTCAGGTTATCAAAATGAGGCAAGATGTGATT AGTTCTGAGATTTTAAAGATGGCACTTGAACATGCAAGCCAAAGAGGAAGTTAGGGAAGCTACAAGAAGA AAGAGAGAAATGAATCTTGGAAATCAAAATCAGAAATTTGCTCAGTGGTAAGTGAATGAAGAAAGGAGAGAGTAG ATTTTCTAAGGGTAGAGAGAAACGCCGCGGTAGCTTTACTTGTAAAGTAAAGCGGATCAATTAGGTAATCTTT TTAAAGCACTCATCTTTTAAATCTGCTCTGATTGAGACAAATTTTCAACTGAATTTTGTAGTTGCACCGAG ATTTTGTGTTTCCACATCAAGCATTTTACACTCTTTTCTTCATGATTTTCAAGATCAAAATTTTCATCAGCAA ATCCCTAA	2826	QKNHVYTPVYNELIEKYSEIPLNDKLKD TPFMVQVKLPNYKDYLLDNKQVLTFFK LVHHSKKITLIGDANKILQYKNYFOANG ARSDIDFYLQPTLNQKGVMIASNYND NPNSKEKPQTFDVLQGSQPMLGANTK NLHGVDVSGANNKQVINEVAREKAQL EKINQYKTLLODKEQEYTRKNNQRE ILETLSNRAGYQMRQNVISSEIFKNGNL NMQAEEEEVREKLQEEREENEYLRNQI RSLLSGK

HP0933	2827	CTATCCATTCTTCGCTTTCCACACAGACGCTGATTCTAAGGATATTGGAGTCAAGTGAGGAAGCAATTGATTTCAT TTCCAGGAAACCCCTGTGTGTGGCGTGTCTATATCGCGCTTATAAAATCAAGACCTTATTGGCTCTAGC GCTTTGCGTGGTGAACCTTTGGGCGCACGGTGGTAGGACTTTGCTTTTAGGGAGCGCTCAAGAAAGCCCA ATAATAATGGGGATCGATCTGTTTGGTAAGAAATATTTGCTGATTTGCATGGCAATTTCAACGCGACTAATATCTT TTTAACGAATAATTTAATGTCGCAACCCCTAACGCTGGCGGTGGCGGACGATTAAATTTAACGCTGATGAACCTT GAACGCTGACGGGTTAAATTACAGCAATTTCCAAACCGTGGCTTTGGCTTACAAACCGAGTGGAGCCAGCATTCAT GGCGAATTTAATCCAGCTTTCTATGGAGATTAAATAATCTAATTTAGGATTTACATGGGAGCGCTTTAATTT TAATTCAGGGGTATCACCTTTTGAACACACCACTTTTAGCGGCTGGACCAATATTAAACGGAGCGACTGAGAGCGGCT CATCGTATGTGAATATGGTTCGGAATACGGATTGATATTTCTAATTTAGGAGGGGCGCTTCGCTATGATT GAAAGCTAATAACATTATTTCAATAACTCTCAATGGTTATGATGTCTAAGATGTGAATCAGTCATCATTTGAAT GGGAATGTTACTTTCAATAATCCAGGCTTTCAAGTCAAGCCCAATGGGCTATTATATTGGGATAGCCAAACCCAA ACGGCTTTAGAAACGCTTCAAGCCTTTCTTTTACAACAACAGCGTGGCGAATTTTAACGGCACACCGCTTTTAAC GGGGTGTCTTATTGAAATTTGAACCCCTAACGCTCAAGTCAAGTCAATCAAGTAAATTTCAATAACGCTAATGTAACCTT TTTATGGCAT	2828	IHSSLFHTDADSKDIVSQVRKQDFIP GKTPVCVGVCIAPYKNDLIGSSAFA WSLNFATVGTLLGSAQEKANNNG GSIWFGKNLLYLHGFNFATNIFLTNN FNVGNPNAGGATINFNADETLDAG LNYTNFQTVLGLQTSASQHSWANFN SKLSMEIKNSNFRDFTWGGFNFSGR TFENTTFSGWTNINGATESGSSYVNM VANTDLIFSNSILGGGIRYDLKANNIEN NSQMVIVSKNVNQSSINGNVTFNNS RLSVKPNAAINIGDSQTQTALENASSLS FYNNSVANFNNGTTAFNGSVSYLNLNPN AQVSFNQVNFNNANVTFFYGIPLFGKTP DFGNSARLINFKGNNTNFNQATLNLRAK NIHINFQGVSTFKQNSTMNLAESSQAS FNALKVEGETNFNLNSSLNFGNSV FNAPVSFYANHSQISFTKLATFNDSAS FDLSNNSTLNFQSVLLNGALNLLGNGS NNLAINAKGNFSGSKGILNLSYMNLF GGDKKTSVYDVLQAQNDGLMGNGY EKIRFYGIQIDKADYSFDNGVHWRFT NPLNTTETITETLHNNRLKVQISQNGVS NNKMFNLAPSLYDYCKNPNYNETENSY NYTSDKVGTYYLTSTNIKGFNQNNKTPG TYNAQNQPLQALHIYNQAITKQDLNMLIA SLGKEFLPKIANLLSSGALDNLNPNNSF ETLFGIFEKYGITLQENWKSLLKIINNF SN
HP0933	2829	GCAATACAGAAAGCGGAGCCTTATATTGTCATCCTATTGCGTGGCAAGCTTGGTAGCGTTTGTGGGGGC GATGAGCGGATGGTGTGTGCTGCGCTTTTGCATGATGTGGTGAAGACACGCTTGTAAAGATTGAACGATTGAGC AAGAATTTGGCAAGATGTGGCTAATTTAGTGATGCGCTCACTAAATCACTGAATCAGGAAGAAAGAAATTAGGC GTGAGCTCTCAAGATCCAGAAATGGTGGTTTCAAGCGCTCACTTTCAGAAAGATTTAATTAGCGCGATACAAAGATCC AAGAGCCTTAGTGTAAGATTAGCGACAGGTTGCACAACATGCTCACCTTAGACGCTTGCCTCATGACAAAGCAAG TGCCTATTTCTAAAGAGACTCTAGCGGTGTATGCCCTATAGCGAGCCGATTGGGCATGTCTTCAATCAAAATGAA TT	2830	QYRKSGEPYVHPICVASLVAFCCGDE AMVCAALLHDVVEDTPCKIETIEQEF QDVANLVDALTKITEIRKEELGVSSQDP RMVVSALTFRKILISAIQDPRALVKISD RLHNMLTLDALPHDKQVRISKETLAVY APIASRLGMSSIKNE
HP0933	2831	GCTTCITTTATAAATAAGAGTAGCGGTGCTTGGTGGAGCGGATACCGCCGTAGAAGAGCGGATTATTGGCC AACATCTGCAAAAAGTCTATCTCATCCACAGAAGAGATGGTTTAGGTGCGCGCTATCACTTTAGAGCATGCCAA AACACGATAAGATTGAGTTTAAACCCCTTATGTGGTGAAGAAATCAAGGGCGATGCTTCTGGAGTCTCTCTTTA AGCATTAAAAACACAGCCCACTAACGAAAGAGAAATGGTTGCGCGGTTTATTTTGTGGGTTATGATGTG AATAACGCGGTGTTGAACAAGAGATACTCCATGCTATGCAATGCGATGAATACGCTCTATTTGTCGTGGATT TCCATGAAACGAATGTTCAAGGCTTGTGCGGCGAGGAGATTCGCTATTTGCCCTTAAACAAAGTGGTTTGGCG TGCAAGCGATGGCGCTACGGCAGCCTTAAGCGTGATTCTTATTAGAACACCATTAATCAAGCTTATAACCCCT	2832	FFYKNKEVAVLGGGDTAVEEAIYLANIC KKVYLHRRDGFRCAPITLHAKNNDKI EFLTPYVVEEIKGDASGVSSLSIKNTAT NEKRELVPFGFFVGVYDVNNNAVLKOE DNSMLCKCDEYGSIVVDFSMKTNVQG LFAAGDIRIFAPKQVWCAASDGATAALS VISYLEHH

HP0933	2833	GATGTTTCATGTCGGCGGATGCGGTGATTATCAGTAAAGCGGATATGGTGGGTTAATTCAGGGTTTCTCAAG TCAAAGAGACATGCAAAAATTAAGCCTGAAGCGCTATTTTTAATGAGCTCTAAGACCCCTAAAGTTTGAAG ATTTTAAAAATTTCTCTAGAAAAAGCGTGAAATACCAGTCCACGCTTGGTAAATGTTTATGTTAGCGATCCCC TCTAAAGTCATAGCCATTAGGATAATGTGGTCTTTGGAACCTTTGGCGTTCAAGAGAGCGGAGCTTGGATT AATGGCGAGTCCGTTAAGTGCGGATTATGTGCTGTTGCACATCGGCTATGTGATGAGCAAGATTGATGAAAAAG AAGCCCTAGAAATCCATTGAGCTTTATCAAGAAATGATCGCCAGAAATGAACGAAACGCAATAATAACAATGAGCGTTGA TCACCTCATTTGCGCCCTTAGAGACAAAGCAACCTTTTAGCGCTCTAATGCAATCAAAAACTCGCTTCAAACT TGAAAAAAATTAGTCATCATGGAAGTGTGCGGAGGCGATACGCTATCATGAATAGGGCTTTTAGATTGAT GCCTAACAAATTAGAGTTGTGCTAGGCGGCTGCGGCTGATGCGGATGATGCAAGAGCGGCTTGTATGAAGCT TATGAAGTGGTACTATCAAGATAGCATTTGATGTTAGTTAGGGATATGATGAGAGTCCCGGGAGCTATGGGAG TTTGATAGAGCCAGAGAAAGGGTTGATGCACGCTTTTGTATCGCCCATGCAAGCTTTAGAGATCGCTAAAG AAACCCCTACTAAAAAGTCAATTTATGCGATCGGTTTGAACCCACAAACGCTATGAGCGCTAGCGTTTATGGA GCGCCAAAAAGAAAAATTAATAACCTTTTTTCCACATTAACCACTTCTAGTGCCCTCCAGCGTGAGCGCGATT TAAAGATCCAGCATG	2834	IMFCADAVIISKADMVEVFNFRVSQVH EDMQKLKPEAPIFLMSSKDPKSLEDFK NLEKRENYQSTHSF
HP0933	2835	TAGCATGCTAGTGGGGTAGCGGCATCGCTCATTCCTTCTTAGAGCATGATGACGCCAACCGTGCTTAATGGGG ACTAACATGCAGCGCCAAAGCGGTGCCCTTATTAAGAAAGCGACGCTCCCATTTAGGCACGGGATTGAAAAATTTAT TGCTAGGATTCTTGGGAGCGATCAAGCCCAATCGCGCAGCGTTGTAGAAAAATTTGATTCTAAAAATATTTATAT TTTAGCGGAAAGCAAGAACCCCTATATTGATGCGTATTTCTTGAACCACTTGGCCACCAACCAACACACCCAG TTTCAATCAAGTCCCTATCGTTAAGTGGCGATAAAGTGGAGCGGCAATCATCGCTGATGCGCCCTAGCATG GATAGCGGAGTTGGCGTTAGGGAATAATGTGCGGTGGCTTATGCTTGAATGGCTAATGCTTGAAGACG CGATCGTGTGATGATGATCACTAAGATGATATTTCACTTCCACCCACATTTATGAAAAAGAGTGATGCTA GGAGCTTAAGCATGGTGTGAAGATTTACCGCTGATATTCCTGATGTAAGAGAAAGCGCTCGCTCATCTTGAT GAAAGCGGATGTTAAAGTGGTACTTATGTAGCGCTGGCATGATTTGGTGGCAAACTTCTCCTAAAGCGGA GATTAAAGCACGCTGAAGAGCGGCTTTAAGGGCTATTTTGGGATAAAGCGGCGATGTGTTCAATAAGAGTT TGTATTGCCCTCCAGTTTGAAGGCGACGCTGATGATGTAAGTCTTCACTAAAGGCTATGAGAAAGACGCG CGAGTTTGAAGCGGCTATGAAGAAAGAAAGCGGCTGATGAGCATTTTATGCGCTTACCATGCTCAATAG AGAAAGATTGTTGCGGCTAGCTCGCTCCTTCTCAAGCGATTTTAGAGAGCGCTTTCAGCCATAACGCGCAAGGATT ATAAAGAGCGGATCAATCCCT	2836	SMLVGVAAASLIPFLEHDDANRALMGTN MQRQAVPLLRSDAPIVGTGIEKIARDS WGAIKANRAGVVEKIDSKNIYILGESKE EAYIDAYSLOKNIARTNNTSFNQVPIV KVGDVAGAGQIADGSPMDRGELALG KNVRVAFMPWNGYNFEDAVVSECITK DDIFTSTHIEKEVDARELKHGVEEFTA DIPDVKEALAHLEDESIVKVGTYVSA GMILVGKTSKGEIKSTPEERLLRAIFG DKAGHVWNKSLYCPSPLEGTVIDVKVF TKKGYEKADARVLSAYEEEEKAKLDMEH FDRLTMLNREELLRVSSLLSQAILEEPF SHNGKDYKEGDQIPKEEIASINRFTLAS LVKKYSKEVQNHYEITKNNFLEQKKVL GEEHEEKL SILEKDDILPNGVKKVKLYI AT
HP0933	2837	CGAAGAGTTCGCTCTCAACAAGTGGCCAAACAGCCACCGCTCTCTTTATACCGATTAGGAAAAACCATTTT AGCGAGCGTGTGGTGGAAGAGAGCGCTGTGAGTGAAGATTTCTGCTTTAGTGGTGAGTTTGAAGAAATCTT ATGCAGCCGGAAGATCCGGCGGTTTGTAAAGAGAGAGCGGCGCAAGATTTTGAATCTTAACCTCTAG GCTCATAGACAGGACTTACGCCCTTATCCCTAAAGACTACCGCTACCTACACAGATCACTTTAATGGTTTAAAG CCATGATATTGAAATGACTTGCAGGTTTCTGCTTTAAAGCGGCTTACAGCGCTCTCTTTGGCCCATATCGCTCC TATTAAAGCGTGAGCGCTGAGGATCGCTAGGATGATAACGAATTTATCATTAACCCTAGCGCAAGCTTTTGA ATCAATCCAGTTTGGATTGTTCGTGTCTGGAACGAAAGAGAGTTTGAACATGATAGAAATGCGCTCTTTGGGCGCA AAATTGAACGCTTTAGAGAGCGCTTAAATGTTAGAGCTTTAGAAATGGCTCAAAAAAGTTTGAAGAAACTTGCACG CTTTATGAAGAGATTTTACGCCCCACCAAAACGAGCTGTTTTCAAAGAGAGCCCAAGGAATAG	2838	EEFALKQVAKQATSSLLYRLGKTIILAS VCVEREPVSEDFLPLVQFLEKSYAAG KIPGGFVKREGRAQDFEILTSRLIDRTL RPLFPKDYRYPTQITLMVLSHDIENDLQ VSALNAASAALFLAHIAPIKSVSACRIAR MDNEFIINPSASLLNQSSLDL FVSGTKE SLNMIEMRSLGQKLNAL EEP LMLEALE LAQKSLEETCTLYEEIFTPHONELFFKE SQGI

HP0933	2839	GTGTTTTTATGCAAGGGTTTTAAGAGCCTGTTTTGGGGTTAAAAAGATCCCTAAACCATTCGCTCCTCTAGTA GAAAAGGGCGTTTTAAAAAGAGCGCTTGAATTGAAAAGGATCGCTATTTTTAAAAAGAGCGCTTTGATATAGGCAAA GTTGAAAAAGTAAAGATAAGCGGTTTTTCATTTCTTAGCGAAATACCTAAAGACCTTTAATCAAAAACCTTAC CCCCATCTTTAAAAACAGACGCTTTGATTTATGCCAATAGATGTTCTAAAAAACGCCCATAGCCTTTTAAAGC CGCTCTTTAAATGCAGATCACACGATGATAGCTTACTTGGCTAAAAAATAAACAGATTGTGGCTATCCCTTTTAA GAGCCTTTAAAAACCTGTTTTCTTTAAAGCACAGCAGCAAAATCTTACTAGATTGCCAGGCAATGCCGTGTA ATTGATACTAAAAAGCGTGAAGGATTTTCAAAAGATTGCTTGAATTTAGCGCAACATACGGCACTTAAAGCGAGC AGCCTTTTGACAGGGTGAAGGATTTTCAAAAGATTGCTTGAATTTAGCGCAACATACGGCACTTAAAGCGAGC GATTTTAAAGACAGGATCAATTATCTCACATCCCTTTATCACCATTTAGCCCAAGACGCTAAAGATTTTGACGATG CGATTTTATGACCAAGAAAAGGGTTTTGTTGCGGTTGCTGATGAGCGAATTTGTGCCGAAACATTCCTCA GTTTGGATAAAGAGCTAGGGTTAGGGTTTTAGCGTTGATTTCCCTAATAGCGTCTATCCCATGCTGCTTGTGAT TGCTCAAGGGCATGCTCATTAAGCGTTTGAAGCGTTTGAAGCGCTTGTAGTGATGAATCCCTTTAGATAATTTGA AAAC	2840	CFLMQGFLRSLFFGVK<IPKPFAPLVE KGVLEALELKKDRYFLKEGFDIGKVE KVKDKAFFISLAKNYPKDPKLNLPSPF KTDALILCQIECSKRPFAFFKAALLNAD501 HTMIAYLAKNNQIVAIJFKEPFKKPVS LKSQKSLLELPRHCVVKIDTKKREISE LGALEDPLIDENLSLFDKDFSKDC LNLAQHYAQLKASDFKDRINYSHIPFIT DPKDAKDFDDAIFYDQEKRVLFVAVAD VSEFVKHSSLDKEARVRGFSVYFPNS VYPMLPLSLSQGACSLKAFKRLALVY EIPLDNLKN
HP0938	2841	CGAGATTTTAGTGGCGAGAGCGCCAAAAGACAAGCGGTAAACCAACCCAGAAAAACCATTTATCTATTAAAAAGAA TCATGGGTTTGATGTTAATGAAGATAAGCTAAAGAGCGCTTGCCTTATAAGATTGTGGATAGGAAT GGGCTTGGCGATTGAGATTCGGGTAAAGTTTATACCCCTCAAGAGATTTAGCCCAAAATTTAATGAAGCTCAAA GAAGACGCTGAAAGTTATTTGGCGAGAGCGTTACGGAAGCGGTGATCAGGTTCCAGCTTATTTAACGACAGCC AAAGAAAGCGACTAAAGAAAGCGGACGATTGCGAGGCTTAAAGGATCAATGAGCCTACAAGTGGC GCATTAGCTTATGGCTTGGATAAAAAGAGAGCGGAAATCATGTTTATGTTGGTGGGGGACTTTTGATGTT ACCGTTTATAGAACACGCGATAATGTCGTGGAAGTTTACCCACAGGGCGGATCGCTTTTGGGGCGGATGATTT TGACAATCGTGATTGATTTCTAGCGAGTGAGTTTAAAGCGAAACGGGCTTGAATTAATAACGATGTGATGGC GTTGCAACGCTAAAGAAAGCGGCTGAAACGCTAAAGAAAGAACTGAGCTCTCGATGGAGACTGAATCAATTTGC CCTTTATACCGCGGACGCTACCGGCTAAACACTTGGTTAAAAAAGCTAGGCTAAATTTGAAAGCTTGACA GAAGATCTCATGAAAGAAACGATTTCTAAATGAAAGCGGTGATCAAGATCGGGGCTAACCAAAATGAGATTCA GAAGTGGTGATGGTGGAGGCTCTACTCGTATCCCTAAAGTCCAAAGAAAGGTGAAAGCGTTTATTAATAAGATT GAATAAAGCGTCAATCCTGATGAGGTCGTAGCGGTGGGAGCGAGCATTCAGGGGCGGTGTTGAAAGCGGATGT GAAAGATGTGCTTTATTAGAC	2842	EILVGESAKRQAVTNPEKTIYSIKRIMGL MFNEDKAKEAEKRLPYKIVDRNGACAI EISGVYTPQEISAKILMKLKEDAESYL GESVTEAVITPAYFNDSQRKATKEAG TIAGLNVRINEPTSAALAYGLDKKESE KIMVYDLGGGTFDVTVLETGDNVVEVL ATGGDAFLGGDDFDNRVIDFLASEFES ETGIEKNDVMALQRLKEAAENAKKELS SAMETEINLPFITADATGPKHLVKKLTR AKFESLTEDLMKETISKIESVIKDALTK NEISEVMVGGSTRIPKQERVKAFINK DLNKSVPNDEWAVGASIQGGVVKGD VKDVLDDVTPLSLGIE:TLGGVMTKVID RGTTIPAKKSQVFSSTAEDNQPAVSIMV LQGERELARDNKSGL<FDLQGIAPAPR GVPQIEVTFDIDANGILTVSAQDKNTGK SQEIKIS
HP0938	2843	CAGACGCTAAGAGCGGTGAATTAGAGGATTTGTATCAGGAATCAGTGAAGATAAGCGTTCTATTTCTATTTGCCC CCACAAACGCCCAAGACATGCTCAAGCGGTGATTTTCAAGAAAGGTATACGGCTTATTTAGATGAG GTGAGGGTCAGCACTGATGAAAAAGATTTCTTATGAATGACATTTAAAGGCTTGTATTGAAAGTTTATATTG AAACCATGGTGTGCCATGAATCTAGGATAGTGAAGATTTTATGAGCGAGCTGTCCAACTAGACTATAAGAG ACCAATGACCCCTAAACAGCGGATTTGATTTTAAATCAACACTTGCAGCGTGGCGGAAAGCCTGAACGAAATTTGTTT TCAGAAATCGGTCAATTCGCTAAATCAAAAAACCCACGCCCAAAATCGGGGTTTGGGGTGCACTGCAAGCCACAT GGGAGCGGATATTTGAAA	2844	DAKSVELEDLYHEFS:DKRSIFYFAPT NAHKDMLKAVDFFKEKGHTAYLDEV VSTDEKDFLYELHII

HP0938	2845	CGCCAAAATTCCTTTAAATACACCCCAACACTATAAGGAGCCTAACAGATTTAAATGCAACAATCTGGC ACAACCATGCGTTTATACAGCGGCTTTAAGCGCTCAAAAGGGCTTTTAAAGCGGGGACAAATCCTTAAAC GCACGCCCATGAAAGAATCATGAGCCTTTAAGGCTTTTGGGCAAAATTTAGGGAGAGAGATAACCATTT GGCCCTTAGTGATCTTAGGAGTCGTTAAAGCTTGCCATTATGAAGCCCTATCGCTCAGCTCAAGTCAAAA GCGCTTTATTTAAGCGCTTACAGCTCAAGGCGCAAGCACTTATAAGAAAGCGAGCTTACGCTCAACACACA GAAATCATGCTTAAAGTTGGGAGCTGATATTCACAAATCAAGACGGCTTTTAAATTTACCCCTAGAAAACCC CTAGAAGCCTTTGATTTACGATAGCTAATGATCGCTAGCGCTTTTTCGCCCTCGCTTGGCGGATTACGCCA AAAAGCGCCTTCTTTTAAATGTCTTCTCAACCCCACTCGCATAGAGCTTTTGAAGTTTGAAGAAATGGGT GCTTCCATAGAGTATGCGATTAGTCCAAAGATTAGAAATGATGGCGATTTATGTAGAGCATGCCCTTTTAAAG GCGATCAATATTGATCAAAATATCGCCAGTCTTATTGATGAATCCCGCTTAAAGTATCGCTATGCTTTTGAAG GCAAGCATGTTAAAGCGCTAAAGATTACGAGCTAAAGAAAGCGACAGGATTAAAGCGGTTGTTTCAATTTCA AAGCTTAGGATTGAGTGGGAAGATTGAAGATGGTTTATGTAGAGGATTAGAAGATAGCCCATTAAGAA CAGCGCTTTCTAGGATTAGCCCCCTTATCAAAAGCTTCAATGACCACAGGATTGCGATGAGTTTGTCTTTTA ACTTAGCGTTG	2846	AKNSFKTPPTTIKEPNKILNCNNSGTT MRLYSGLLSAQKGLFVLSGDNLSNAR PMKRIEPLKAFGAKILGREDNHFAPLV LGSPLKACHYESPIASQVKSFILSAL QAQASTYKESELNRNHTIMLKSGLA DHNQDGLKISPLEKPLEAFDFTIAND PSSAFFALACAITPKSRLLKNVLLNP TRIEAFVLLKMGASIEYAIQSKDLEMI GDIYVEHAPLKAINIDQNIASLIDEIPALS IAMLFAKGSVMVKNADLRAKESDRIK AVSNFKALGIECEEFEDGFYVEGLEDI SPLKQRFSSRIKPLIKSFNDHRIAMSFA VL:TLALPLEIDMLECANISFPQFKHLLN QFKKGSNLGN
HP0938	2847	ACATTAAACTTCTGAAGTGGCAGCATGAGCGGGCTTTAAATGGCTTGCTAAAGCAATTTGCAATATATTG GCAATAATATAAACCAAGAGTACGCCCATCTCTGAAGATATTAAAGAGGGTGTGATCGCTGTGTGAGCTTG AAATGAGCGAGCCTTTGTTGAAGGGCAGACTAAATCCAACTCGCAGTTGCTATCGCGCGCTTGGTTCAAA ATTAGTCTATGATAAAATCCATCAATTTTGAAGAAACCCCTAACGAAGCCAAATCATTTGCCAATAAGCCCTACTA GCTGCAAAAGCCAGAGAGCCAGTAAGAAAGCCAGAGA	2848	IKTSEGGTHEAGFKMGLSKAILQYIGNN IKTKESRPISEDIKEGLIAVSLKMSEPL FEGQTKSKLGSYYARALVSKLVYDKIH QFLEENPNEAKIANKALLAAKAREASK KAR
HP0938	2849	GAATGGGTGGAGATTGAGGTTGGAGCATTTGGATAAGTGATTATTAGATCAAGCCCCCATAGGCAAAACCC CACGAAGCAACCTGCCACTTACACGGGAGTGATGATGAATCAGGATTTATTGCCAGCAAAAGAGCTAAA ATTTAGGCTATAGTGGAGCGCTTTAGCTTAAATGTTAAGGAGGGGTGCGAGAAATGCCAAGCGGATGGG ACATTAAATAGAAATGCATTTTGCCTGATGTGTTAGTCCATGCGATAGCTGAAGGGCTAAATACAAACCC AACTTTAGAAATCAAGGTGAAGGCAATCCATTGCCGATGTTGAACATGAGCGTGAAGAGGCTTATGAAATTT TTGCTAAATCCCTAAATCGCGTGAAGTAAACGCTTATGGATGGCTTAGCTATATCATCTTAGGGCAA ACGCTAGGACTTTAAGTGGGGGAGGCTCAAGGATCAAAATAGCTAAAGAAATGAGTAAAGAAAGACACAGCAA ACCTTTATATTTAGTAGGCTTACTACCGTTGCTTTGAAGACGTGAATCATCTTTACAAGCTTTGCTATTCTT TAGTGGCTTAGGCAATCTATGCTAGTATGAGCATAATTTAGACATTATCAAAACGCTGACTACATTATAGACAT GGGCGCTGATGGGGGATAAGGGCGGAAAGTCAATTCGAGCGGCACGCTTAGAGGTGGCGCAAAATGGCG AAAAACCCAAAGCTACAGGGAATTTTAGCTTG	2850	NGVEIVGLEHLDKVIYLDQAPIGKTPRS NPATYTGVMDEIRILFAEQKEAKILGYS ASRFSNVKGGRCCKCQGGDIKIEM HFPLDVLVQCDSCCKGAKYNPQTLEIKV KGKSIADVLNMSVEEAYEFFAKFKPIAV KLKTLMDVGLGYITLQGNATTLGSGEA QRIKLAKELSKKDTGKTLYLDEPTTGL HFEDVNHLLQVLHSLVALGNSMLVIEH NLDIKNADYIIDMGPDGGDKGKVIAS GTPLEVAQNCCKTQSYTGKFLAL
HP0938	2851	ATACCACTTTTGGCTTACTGGCAGCCCATTTTGCAGCTAATTCGATAAAACAAACCTTTAGGCACGACAGA GCAAAAGTTTGGGAAATGCCTCCACCAATACACCTATTGATGCGATCAGGATAAAACGTTTGGCCTTTAGAGT GGAATACCACACACCATTAAGCTAAGAGGACATTAAGGATAAAGGTTAGAGCGGTTGATGAAAGAAACGCC TTTTGGATACTAGGAGGATCAAGAAATCACTAAATGCATTTAGAGCGTTTCAATCAAGCCACTAAAGAAATTA CAATCCATTCTGGCATGCTTAGCATAGAGCGCTGAAAAATACCAAGCCTTTAAGAAAGAAAAACACGATCT TAAATCGCTGCCATTTTAGCTATAGCGCTAATGAGGAAATGACACGCTAGAGATGAAACAAATGAAAGCGCTG CCGCTAGACAAAGCTCAAGGATTTTGAAGGGCGGATTCGCGATTATATGGGATGTTTGGCGTTTCTTTTG ACACTTCGGATCAAAATTCCAAAGTTATTACAGGATCTTCTCA	2852	YHIFGFTGTPIFAANCCKNNPLGTTEQ KFGKCLHQYTIIDAIRDKNVLPFRVEYH NTIKAKEDIKDKVRAVDEKNALLDTRR IKEITKCILERFNQATKNKKNFNSILACSSI EALKYYQAFKEEKHDLKIAAIFSYSAN EEDTLEENNESACRLDKSSRDFLEG AIADYNGMFGVSFDTSDQKFQSYKQD LS
HP1414	2853	CCATGAAAGGGTAGCGAGCGCAATCTCGTGGCAGCCCATCTGCACGGTTACTTCTAACACTTGGGAGCCGG CTGCGGCTATGTGGAGAAACCGTAACGAATCTAAAAACAGCATCGCTCATTTGGCGACCAAGCGGAGCAATC CATAATGCGCGAAATCTCGCTACCTTTAGCGAATTTACGGCCAGTACAAAAGCTAGGCGAACACTATGACAG CATCACAGCGCGCTCTAGCTTGGCTGATGCGCAATCTTACAAATGTGTGAGCAAAAGACTAACCCCTAACA GCCGCAAGGATACAGGATAATTACTACATTGACTCCAACTCCATCTCAAGTCAATCTAGGAGTCAAGAACTC GGCAGTAACCTTTTACAGCGCGCGGCTAATCGCGCTTCTACCACTCAATACGCGGATGAATGGGATTGGCT TTCAAGTGGCTATAAGCAATCTTTGGGAAACAAACGATGGGCGGAGATACTACGCGCTTGTGGATTACAA CACACCTATAACAAAGTCCCAATTTTCAACTCCGATCTGATGTTGACTTA	2854	HEKGSQDNLRGTPSGTTSNTWAG CAYVGETVNLKNSIAHFQDAERIH ARNLAYTLANFSGQYKKGHEHYDSITA ALSSLPDAQSLQNVVSKTNPNSPOGI QDNVYIDNSIHSQVQSRSDLGSPFR RAGLIAASTTNGAMNGIGFQVGYKQF FGKNKRWGARYYGFDVNYHTYKNSQ FFNSDSQVWT

[illegible]

HP1224	2887	CGCTCTATGGCGGATTGCGTGGCGAATTGTTCATATAAAATCAGGGATCAGCATAGATATTGGAGGGGGTAG CACCGAGTGGCGGTTGATTGAAAAGGCAAGATTAGGACTTAATCTCGCTTGATGTTGGACGATTGCAATTAAG AAATGTTTTTAGACAAAGACTTAGAGGTCAAATGGCTAAAGCCTTTATCCAAAAGAGTCTCTAACTGCCCTTTAA ACAAAAAAGCGCTTTGGGTGGGGGACGATCAGAGCGTTGAGTAAGTATTGATGAACGCTTTGTACCCCT ATTGATCTTTGCATGGCTATGAATAGATGCACATAAAATTTAGCGTTGATTAAGAAATCGTCATGCTCAAGAAAG ATCAATTACGGCTTTAGGGTGAATGAAGAGCGTTGGATAGCATCAGGAGCGGGCGGTTGATTTATCATCGTCTG TTGGAGCATTTAAACTTCTTAATGATCATTAGTGGGTGGGGTGAGAGAGCGGTTGATTTGAGCGGATTTAT GGCCCATCATTAACATAATCCCCCAATATCAACCCCTCTCTCATCTTTAAAGATCGCTTTTGGCCCATGA AAAGCACAGCCAAAGGTCAAAAAGAAATCGGTGAATTTGTTGAAGCCTTATCGCCTTGCATAAATAGATGAAA ATACCTTTCCATTAAAGATTGCGGGGAATTAGCGAGCATGGTAAGATTTAAGCGCTCTATTAGCCCAAGCA CAGCGC	2888	LYGGIACANLLHKNSGITIDIGGGSTEC ALIEKGKIKDLISLDVGTIRIKEMFLDKD EVKLAKAFIQKEVSKLPFKHKNAFGVGC GTIRALSKVLMKRFYCYPIDSLHGYEID HKNLAFIEKIVMLKEDQLRLGLVNEERI DSIRSGALISVLEHLKTSMLTSMITSGVG VREGVFLSLLRHHYHKFPNINPISLIS LKDRFLPHEKHSQKVKKECVKLFEALS PLHKIDEKYLFLHKLKAGELASMGKILSVY LAHKHS
HP1224	2889	TGAACACCCCTTTAGCGTATTGAACACCCAGAAACAGGATTTCAATATCCAGTCTTTGACAGCGATGAAGAAAGCC CTGAAAAATTAGAGCAACCTATAAGAAATTGAAAAAGAAAAATCCCTTTGTGATAGCCTTATTGACTAAAGAGG GCGTGGAAAAATTGCTCCAAACACACCATTAAGACCCCTACTTATGTGCTACGGTGAATAGAGCGCAATTGGAA AATCAAACTGAACGTTCTTTGAGCGAGCGCTTGATTTGGGGGATTGATTATAAGAGCAATTAAGCATGCTCAGG GCCTTCATTACCCCTAATTCGCCCGTGAATGAATACGATGACGATGGCCTAATAGTGAACGCTTGAGGCAATCAC GGAGTCTTTAAGCATTAAGTCAACACCAAGAAATATTTCTTACAAGCAAGCCACGAGTTTCTAAAAATTTAGA AAAAACGATGCGTTTTTAAAAATTTCTATTTGATTTTAAACACCCCTACCCTAAAGCGGCTTATTCTTCTCAAT AGGCTTTTGAATACAAGCCTCTTAAATCCTTTCCACACAAATCAATTTCAACCCCTCTACTCTTACTCACCCAA CCTAAAGACAGAAAGGATTATTGATGTCATGCTTCAAAATAGCGATGAAGCGTTATAGAATACGCTCCTTA TTGGAGAGCGAATTAAAGGATGATTGGGTGAATTTCCAGCGCAATCGGCTAGAGGTGTTTTTAAACACGCTAGA TCGGCATTTTAAAAATCTTTCAAGAGAAATTAGAGCAATCAGGTCCGTACCAATCAATTTAT GCTCTCTAAAGGCTTTGCCAGCTCACTCATATGGATAATGCTTTATGCGGATAACGGCTCATCTTGTGTGAAT CGCTTTGAAATGAGCTATCACGCCCTATTTTAAAGAAATCAACGCGCGCAAAAGCTTTTATCGCTCTCTAAT TCCTATCATGGCGAGACTTTGGAGCGTTAAGCGTGGCGATGTGAACCTTTATAAGACACTTACACCCCTTATT GCTCAAAATCTCACACACCTGTGCTTAAACGACCATGAATAGAAATAGTTGAACGCTTTAAAGCGTTTGT AGACAAGCATAGTGAAGAAATTTGCGCTTCAATTGCAAGCGCCTCTTTGCAATGCGCAGGGAATATGCATATTATAG CGCAAGATATTTAAACAAAGCGTTTATTGTCAGCAAGCAAAACATCCACATTTATTTGATGAATCGCTACCGG GTTTGGCGCACAGGAGCATGTTGCTTATGAACATGCGAAATTAAGCGGATTTTATGCTGTCTAAGGGGA TTAGTGGGGGATTGCTTTAAGCGCACTATTAACCCATAATGAATCTATAACCAATTTACGCCCCCTATGAAG A	2890	NTLLAYLNRNDFNIQVFDSEESPE KLEQTYKEIEKEKFPFVIALLTKEGVEN LLQNTTISTPTVPTVNRQAQLENQTER SLSERLYFGGIDYKEQLSMLTAFINPNS PVIEDDDGLIGERLRQITESLSIEVKH QENISYKQATSFKNFRKNDAFFKNSIL ILNTPTTKSGILISQIGLLEYKPLKILSTQ INFNPSTLLTQPKDRKDLFVNALQNS DETLEIYASLLESDLRHDWVWNYSSAIGL EVFLNTLDPHFKKSFQENLEDNQVRH NQIY
HP1224	2891	GCTCTCTAAAGGCTTTGCCAGCTCACTCATATGGATAATGCTTTATGCGGATAACGGCTCATCTTGTGTGAAT CGCTTTGAAATGAGCTATCACGCCCTATTTTAAAGAAATCAACGCGCGCAAAAGCTTTTATCGCTCTCTAAT TCCTATCATGGCGAGACTTTGGAGCGTTAAGCGTGGCGATGTGAACCTTTATAAGACACTTACACCCCTTATT GCTCAAAATCTCACACACCTGTGCTTAAACGACCATGAATAGAAATAGTTGAACGCTTTAAAGCGTTTGT AGACAAGCATAGTGAAGAAATTTGCGCTTCAATTGCAAGCGCCTCTTTGCAATGCGCAGGGAATATGCATATTATAG CGCAAGATATTTAAACAAAGCGTTTATTGTCAGCAAGCAAAACATCCACATTTATTTGATGAATCGCTACCGG GTTTGGCGCACAGGAGCATGTTGCTTATGAACATGCGAAATTAAGCGGATTTTATGCTGTCTAAGGGGA TTAGTGGGGGATTGCTTTAAGCGCACTATTAACCCATAATGAATCTATAACCAATTTACGCCCCCTATGAAG A	2892	LSQRQLQTHMDKCFYADNGSSCVEIA LKMSYHAFLKNQTRRKKLFLSLNSY HGETLGALSGDVKLYKDTYTPLLKN LTPVPKNDHEIENSLNALKRLLDKHSE EICAFIAEPLLCAGNMHIYSARYLKQA VLLCKQKNIHIFDEIATGFGRTGSMFA YEQCEIKPDLCLSKGISGGYPLLSALL THNEIYNQFYAPYE
HP1224	2893	GCAAAAAGACGCTTGCGGGTTCATCTATGATCAGCGAGTTTCATGAAGCCTATACCGCATTCGTAATAAACAA GACCGATACGCTATTATTAGGATATCTCCCTCTAGGTATTGGCGCAGCATTTTAACGACTGCCCTTTATGTCAAA TACCCTGATTTGACGCTTTGAAAAGCTTTTGGTGCTTATTATTACCAACTTGGATTGCAGGAGGACGATCACG CGCATCAAGCAACCAAGTATCAACATTATCAAAAACGTTAAAAGCAATAAGAGCGTTGAACCATCAAGAGCTTATA TTGAATAGCATCGACTCTTATAACACCTTTGATCAATACCTCTATACTTATGGGATAGCTCTTCTGTTTATCATAGCA AATGGGTGCGTCTGTCTAGCCCTAGCTAATTTTATGCGCAGATGAAGAGAAACCCCATTTATCGCTATGGATG CCGAAACCCCAAGTGAGCATATTTTGCACAAACGCCCAAGAGGCGAGTCAATGGAACGCGGATTTGACAAAGA AAAAAGAGAAATGGTAAATAATATCGCGAATTTAACCTTTTAAAGCGTAAAGAACGCGCATGCTTTAAACCGG GGATTTGATGAAAAAGAAAAATTTATGGAGGCAACACAGCAAGTGAATGCTGTTATGACATCACTAAAGA ATTGTATAGCAATTATAGGAAGTGAAGTCCCTCCAGAGCGATACAAATCTTTGTATAACACTATCACGCC TGTTTTACACATAGAGGGCAAGATGATTTGAAGATGATTTGATCT	2894	KKDACGFIYEISEFMKAYTALLKKQDRY VYLLRPLPSRYWASILTALYVKYPDFD ALKKLLVSYYYQTWIAAGGTTRIKQTSIN IKNVKSNSKSVETIKELILNSIDSYNFTDQ YLYNLWDSSSVYHSKWVRPVLALANY FMADEEKPHFIAMDAETQVEHILPQTP IKRGSQWNADFDKEKREEWVNNIANLT LLKRKKNAHALNGDFDEKRIYGGKDT SKVISCYDITKELYSNYRKNWNEKSLOE RYKSLYNTITPVLHIEGQEDDFEDDFD

HP1223	2905	GGTTTACGGGTTATTAACTTTTAAACAGGAATGAATGAACATTTGGGGCTGCTTATTTGGGCTATAAAGA CAAGTATTCTAGCCATTGTGAAGTGAGTTTGAATAGCCACAGATAAGCGGATTGGATCAGAGCCTTAATCAATC GCAATATCAGGATAGGATTGTAATATCCAGTCTGGATGACGCTTATGAATCATATAAGCCCTAATTAAGGAAT GAACATGGAACAAAATCGCTATCGCTTTAAAGAGATCGTAGAGGCCTAATGAATCATTTGATTAGATAGAT TGAAAAGTTGGTGAGGAATATTATGAACCAATGAACGCTTATCGTTAAAGCGGTTTATGATCCTACCGCTCCAGA TTTGCAATTTAGGGCATACGGTATTGATCCAAAACCTGGCTTATTGAGCAATATGGGCTAGGGTTAAGTTTTTGT TGGGATTTTACCGCTATGATAGCGGATCTACAGGGAATAATGAACCAAGCCCTTAACCCGGGAGCAAGTCT TAGAAAACGCTAAAACCTTATGAAGAGCAATCTATAAATTTAGATGAACCAACACCGAAGTGCTTTAATCCAC TTGGTTGGATGCTTTAGCGCAAAAGGCATGATAGAAATTTGCGCGAAGTTTTCAGTCGCTAGATGCTAGAAAGG ACGATTTCACTAACGCTATAAGAAATCGCCCATAGCATCGTGGAATTTTATACCCCTTTGTTGCAG	2906	VLAGLLTFLNRNECNIVGVSYLGYKDK YSSHCEVSFEIATDKADWIRALINRKYQ DRIVELSSLDAYES
HP1223	2907	AGGTGTTCAAGACAGCAAAAAGACGCTTGGGGTTCACTATGAGATCAGCGAGTTTCATGAAGCCCTATACCGCA TTGCTAAAAACAAGACCGATACGCTATTATTGAGGTATCTCCCTCTAGGTATTGGCCAGCATTTTAACGACT GCCCTTTATGTCAATACCCCTGATTGACGCTTTGAAAAGCTTTGGTGCTTATTATTACCAACTGGATTGCAG GAGGCACGATCAGCGCATCAAGCAAAACAGTATCAACATTATCAAAACGTTAAAGCAATAGAGCGTTGAAACC ATCAAGAGCTTATATTGAATAGCATCGACTCTTAAACACTTTGATCAATACCTCTATAACTTATGGATAGCTCTT CTGTTTATCATAGCAATGGTGCGTCTGCTTAGCCCTAGCTAATTTTATGCGAGATGAAGAGAAACCCCAT TTATCGCTATGGATGCCAAACCCCAAGTGAGCATATTTGCCAAACGCCCAAGAGGAGTCAATGGAACGC GGATTTGACAAAGAAAAGAGAAAGATGGTAAATATATCGGAATTTAACCTTTTAAAGCGTAAAGAAACGC GCATGCTTTAAACGGGATTTTATGAAAAAGAAAAATTTATGGAGCAAGACACGAGCAAGTATTAGCTGTTA TGACATCACTAAAGAAATTGTATAGCAATTATAGGAAGTGAATGAGAAAGTCCCTCCAAGAGCGATACAAATCTTTGTA TAACA	2908	VFKDSKKDACGFIYEISEFMKAYTALLK KQDRYVYLLRYLPSRYWASILTALYV KYPDFDALKLLVSYYYQTWAGGTITR IKQTSINIKNVSKNSVETIKELILNSIDS YNTFDQYLYNLWDSSSVYHSKWVRPV LALANYFMADEEKPHFIAMDAETQVEH ILPQTPKRGQWNADEFDEKREEWVN NIANLTLLKRKKNAHALNGDFDEKRIY GGKDTSKVISCYDITKELYSNYRKWNE KSLQERYKSLYN
HP1102	2909	GAGCGAGTGTGTGAGCGGTTACTTCTGTAGGCTTAGGGGCGCCCTAAACATTCAGTTTCAGCTAATGACAAA CGGATGCAGGATAATTTAGTGAGCGTGATTGAAAAACAGACCAATAAAAGGTGCGTATTTAGAAATCAAACCTTTA AAATCTAGCCAGGATTTAAAAATGGTCTGTTATTGAAGATCCGGACACTAAATACAAATATCCCGCTTGTGGTAGTAAG GATGGTAATTTAATCATAGGGCTTAGCAACATATCTTTAGCAATAAAGCGATGATGTGCAATTAGTTCAGAAACC AATCAAAAAGTTCAAGCTCTTAACGCCACCCCAACAAATAGCGGAAATTGAACGCTATTTTAAATGAATACCGGCT GATTATGCCATAGATTGCCCTCTACTAACGCTGCAATAAGGATAAAATCCTTTATATTGCTCTGATCCCATGTGC CCACATTGCCAAAAGAGCTCACTAACTTAGGGATCATTTAAAGAAACACACCGTGAGAAATGGTCTGTTGGGGTG GCTTGGGTCAATTCAGCTAAAAAGCGGCTTTAATCCAAAGAAATGGCGAAAGCTAGGGCTAGGGGAGCGAGC GTGGAAGATAAGATCTCTATTCTTGAAAAGATTATCCACCCCAATACGATATTAAACGCTCAAAAGAGCCTGAAGAT TTACGCACTAAAGTGGAATAACCACTAAAAAGATTTTGAATCTGCGGTGATTAAGGGTGTGCTTCTTATACCAT ATAAGGCATGATATAAGGTGCTCTCATGAAAAAACCCCTATAGGAAGATTTCTGATTATGCGATCGTGGTGGTTGA GCGCGTTAGTGATGGTGAGCATTTGTGGGTGTAAAGACAA	2910	ASVLSALLVGLGAAPKHSVSANDKRM QDNLVSVEIKQTNKKVRILEIKPLKSSQ DLKMVVEDPDTKYNIPLVWSKDGNLIIG LSNIFFSNKSDDVQLVAETNQKVQALN ATQONSAKLNAIFNEIPADYAIELPSTN AANKDKILYIVSDPMCPHCQKELTKLR DHLKENTVRMVVWGLGVNSAKKAAL IQEEMAKARARGASVEDKISILEKIYST QYDINAQKEPEDLRTKVENTTKKIFES GVIKGVPFLYHYKA

HP1102	2911	TGCATTGGGGGAATGTTAAATGATCGTGGGAAAAACAAAAATTAACACCCCAACAGAAATCCAAACATGCAAAATCGCGCTCCAAAAAATAACGAATAATCAAGCTCAAAATGAACCAAGCAACGCTCTCTTAGAAGCGTTAAAAATAGCTTTGAACCGAGCGTTACTCTAAACACACAAATGGAATGCTTCTCAAGCTCTAGGAAGTTCTTGACAAACGCTCAATACATCGCTTACAAATACGATTGGTATCAAGCGCTTGAAGAAACCTTAAAGGTTTGAACATGTTGAAAGTGGCTATGCAAAAAGCGACCCCTTATTGATTATAATCCCTAACGGTCAAGCTTTGTTTCAAGTGCCCATCTATGCGCCTGCTCTTAGTTTTTCAAGCATGGTGACCATTTGGAATCATTTGAACATTTCACTAGCGCCCAAAATGCCCTATACTGATGGGCTAAAAATTTAGCATGCTTATGGAACAGGTTATTGAGAAATGATTGAGCCCTATTTCAAATAAACTGAGTGAGATTTTCAAAATATCGCTTATTGAATGGGATCAATGGAGAAATCAAAACCTTAAAGGATCAGTAGATTTGAACCGCTCATAGAAGTTGCTATCTTAACCGCAGAAATCAATTAAGAGAAATCTTGAAAAAAAAGCCGACCTTTGGGAAGAACAACTGAAATTAGAAAGAGAAACGACAGCAAGAACTTGTAGCTCTAAAGTTATTGTCAAAATGAAACACTCGTGAAATAACCATATCTTCTTTGCTCTGTCTTGTGATGGCAGAGATATAACAAGCGGTTTAAAGCAACTGGATAGCACCTACCAAGAGACCAACCAAGTGTCTCAAAAACCTTAGATGAGATTTTTCAACCACTAGCCCTAGTGCTAATAATGAATGGTGAAGAGATGCTCTAAACATCAAAAAAGCGGCCATTGCTTTGAGAGGATT	2912	ALGNVNMIVEKQKINTQTEIQNMQIALQKNNEIKLMNQNALIEALKNSFEP SVTLKTQMEMLSQALGSSSDNAQYIAY NTIGIKAFEETLKGFEETWLVAMQKATL IDYNSLTGQALFQSAIYAFALSFSSMG APFGIETFTLAPTCKPYLDGLKISACLM EQVIQNYRMIVALIQNKLSADDFQNIAY LNGINGEIKTLKGSVDLNAIEVAILNAE NHLNYIENLEKKADLWEEQLKLERETT ARNIASSKVIVK
HP1102	2913	TGACAGCGATTGAAAAACGACCCCTAAGGAATTTACGAACCTCGCTAAGAACGATTGTATCGTGAAGATATTGTCGT TTTTCGCTCATGGGACACTTACACTTTACCGTGGTGGATCGCTTAGATTTGCTTACATGGTGCATAGCG ATTGGGCGGATAAGCCACGAGCGCTTATATCAATAGTAAAAAGCCTTACTCAATCAGGAATTAAGAGTGGGAT GTGGTAAATCATTAAGCGGATATAATAATACCTGTTTCAATTTGGATGGATCAGCTTAAACCTTCTAAGGCTAAAA ACCATTGGCGATCCAAAGAAAGAACCGCTTGAA	2914	DSDLKNDPKEFYELAKNCLYREDIWF SPHGDTYTLVPVGAIALDFAYMVHSDLG DKATDAYINSKKALLNQEIRSGDWVKII KGDKIIPRFIWMQDLKTSKAKNHLRIQR (RNRL)
HP0495	2915	GTAAATCATTTCTTCAGCGTTGAAAAATCCACTCTCTTAATGGGTTTGACACTGATGAAGCGATGAACAAAGCCA TTATCAATCATTTACCAATCGCATTTGCCCTTGATGCCAGAACAGATTTTATTGACGCTTGCTCTAATGAACGCTTAA AGAATTGCAAGAAATTTATCTCAACCAATACTCTAAATAATCGCTTAGCAATTCCTAAAGAGCGACAGCTCGC TTTAATAGAAATCGCTATGAAACGCTCAAGAGATTTTAGCCAGAAACCTCTAATGAAGATCTGATTTTAGAA GAAGCGGATCGCTCTTAAATTAGAGTGCATGCCCTATAGGGTAGAAATCTTTGACACAAAGCCACCATCTAGCAG CCAATCGGTGGGGAATGGTGTGTATGAAACCAACGCTTCCAAAAAAGCTTATCGGCTGCTACCATTTAAAG GCTCTGATGAATACACTCAATGAGCGAATGCTCACCAGAGGCTTTAGACTTTGCCAAAGAGCCACCGCTAAT TTGTGGGTGATCGATGAGGGAGGCGACAAATTAACATCGCTTAAAGTTTAAAGCAGCGGAGTTTGTGGA AGTGATCGCTATTTCTAAAGAAAGAGGATTTAAAGCTTATCGCTTAAAGGGGCGCTAAAGACATTATCCATAC GCCTAGCGGATCTTTAAATTGCTCCCTAGCGACAAACGCTTGAGTGGTGCAAAATTTGCGGATGAAGCCACC GGATGCGGATAAATCTCCATAGATCCACTAACTTAAACATGAACAAATCGCTCTTTTAAAGAGAAAGGGTATAG GAGAAGCCAGCGTGAAAAAATTATTGGATTATTTGGAGTTTGAAGCGATAGAAAAAGCGAGCGAGCAGGAAAAA AACGCCGTTTAAAAAACGAATCTAAAGGAAAAAACATGAAAAAAGATTGAATAT	2916	KISSAFEKIHSLNGFDTDEAMKQAINH YQSHLPLMPEQILLNACSNETLKELQE FISHQYSKKIALSIPKKGDKLALIEIAMK NAEQIFSQEKTSNEDLILEARSFLKE CMPYRVEIFDTSHHSSSQCVGGMVVY ENNAFQKNSYRHYHLKGSDIYTMSE LLTRRALDFAKEPPPNLWVIDGGRAQL NIALEIKSSGSFVEVIAISKEKRD SKAY RSKGGAKEIHTPSDTFKLLPSDKRLQ WVQKLREDESHRYAINFHRSTKLNMK QIALLEKEGIGEASVKLLDYFGSFEAIE KASEQEKNAVLLKKRI
HP0495	2917	GCGTGCCCTCACATCGTTGTTTCTTAAACAAACAGACATGGTAGATGACCAAGAAATGTTAGAAC.TTGTAGAAATGG AAGTGCGCGAATTGTTGAGCGCGTATGAATTTCTGCGG	2918	VPHIVFLNKQDMVDDQELLELEMEMEV RELLSAYEFPF
HP0132	2919	CATGTGCGTTTGGGTTCAAGCTTACGCCGAGCAAGATTACTTTTTAGGGATTTAAATCTAGAGATTTGCCCAAAA ACTCCATCTTGATAAAAGCTCTCCAAACAAATACAGCCATGCACTTAAACGATCAAAACACTACACTTCTAC CGGGGTTAGAGAGCGTGATAAATGCACAAAGAGTTTAAAAAATCCGCTCTCATGTCTTATGACTTAGCGCTAGGTT ATTTGGTGAGTAAGAATAAGCAATACGGCTTAAAGGCTATAGAAATTTTAAACGCTTGGGCTAAAGAGCTTCAAGCGG TGGATACTTATCAGAGCGGAGGATAATATCAATTTTACATGCTTATATGAACATGGCTTATGGTTTGTCAAAAAGGC GTTTCCTAGCCCCAGAAATATGAAGATTTCATTAAGCGGATGCGCCAGTATCTCAATCAGCTCTTAACACTAACCATGG GCGGTGGGCGATTCTTTTGTGATGTGAGTTCTGCGCTAGCGTTAGACGATAATGCCCTTTTGACAAATAGCGCTAATC	2920	MCVCVQAYAEQDYFFRDIKSRDLPOK LHLDDKLSQTQPCMQNLNASKHYTSTG VREPDKCTKSKKSAALMSYDLALGYLV SKNKQYGLKAEILNAWAKELQSDTY QSEDNINFYMPYMNMAWYFVKAFPS PEYEDFIKMRQYSQSALINTNHGAWG ILFDVSSALALDDNALLHNSAN

HP0132	2921	AGAGATACAGGGCATTTTGGATTGCTCTTTGATTCATGATAGCGTGGGGTTTAGATGAGTATTTTCGGCGCAA TCAGAGTTTTTACGAATATTGAAGATTTTGAAGAAGCATTTAGAGCAATCTAAGGATATGGGTAAAGAAATCAACTATT TGAGTGTTTGACGGCTACGCACACGCAATTTGATCACATCCGTTTCGGTTAAGAAACGGCATGCATGTGATTTGT GAAAACCCCTTAGTTTTAGACCCCTGGCGAAATACAGAATTTGAAGATTTAGAGGTGAACACACCAAAAGGGTGT AGTCTTTACCCCTTGGCTTGCAATTCGACACGCTGGCTTTGAAAGAAAAAATTAGAGCGAATTAGACAAAAACCCCT AGCAAGGTGTTGACATCACGCTCACTTATATCAGCGTTCAA	2922	RDTGHFLDCSFDIHDSVGVLDYFAQS EFFTNIEDFEKHLEQSKDMGKEINYLSV CTPTHTHFDHFRFGLRNGMHVCEKPL VLDPGEIQELKDLEVKHQKRVFSLPL RLHCDTLALKEKIKSELDKNPSKVFDIT LTYISVQ
HP1464	2923	AAAGAC	2924	K
HP1464	2925	AAAGGTGTTGACGCTAGCAGAGAGGTTTATCGCTATTACACACACAAGATTTACAAACCGCCCTATAACGCTA ACGCAAGCCTTTATGACATCAAGAATTTTCAAGGCCGTAAACAAGCAAGGCAATTAATTTACCCGCTAAAGCTA AAGATGAATATTACAAACAGCTTTACGCTAATTTGCAAGACGCCCTAAAGATCTCGCAAGAAATACAGCCTAAAG TCTATGAATACGGTTTTTAAGGGAGTGATTTTAAGACAATAATCAAAAGCTAGAGCAAGCGGTATTTTTTAAAG CACTCTATGAGGGATTTAGTTTTATAGAGGGAGAAATTTCTATCCCTAAAGAAATAAGTTTACAAACAAATG ACCAACGCCCAAAAGTCAAGGACAAACCGCTTCAAGGAAACCCCTAAGCTTAAAGCTTAAGGGAACGCTCTT AGAAAA	2926	KVFDASREVYRYHYHTQDFTNRPYNAN ASLYDIKEFFQGRNKQGLNLPAKAKD EYKQLYANLQDALKDLAKEIQPKVYE YGFLE
HP1464	2927	GTAGTAGTAGTGCGAGTAATAACGGCTATACGCCATGCAATAGCACCAATGGAGCAATAAAACGAGTGGAAACAAT TGTTATGAACCCCAACAAACAAACGCGCACCCGCAACCGCACCAACGACAGCAATTTACAAAAAGTCTATAA TGACGCCCAAAAAATAGCCAACTATCGCCAGCTCTGGAAACAATAAAGCGGTGAAACGGCTTAAACAACTCT TTGAAGCGTTAAAAAATAATAGCAGCAGTCTCAGTAATTTATGTGTAATGGTAGCGGTAGTAGTGGCACTACTT GCTCCGGTTGGCTTATCAACCTTTAGGGCAATCCCAACCAATGGAGTGAGCGATACGAATAATTAATTAATCTG CTCACTGAATTCATTAACCGCGGGTTTATCCAAATAATGATAGTAGTGTATCTACTAGTCTTACAAGCGCTTTTC AAGCCATTACGAGCGCTATTTCTCAAGGGTTCAAGCCTT	2928	SSSGSNNGYTPCNSNNGSNKTSNNGN YEPNKQNAATTATATDTSNLQKVND AQKIANIASSGNNGKVENGLKQFFAL KNSSSLNLCGNGSSSGSSTCSG WLNLLGAIPTNGVSDTNLNLNLLTEFIK TAGFIQNDSSVSTSLTSFQAITS QGFQA
HP1464	2929	TGTCGTTGTCGCGCTTTTATCGCTCTTTATGCCATTCAGCGGTCAACAAATCCAAAGTGGAAGCCTTAAAA CCGAATTTATTAAGATTTTAAATACGCTCCCAAGCCAGAGCGGATGACCGGTTGATGATCCCGCTGATTCA GGAAAGAAGAAACAAATGGCAGCGAAAGCTCAACCGCTTCGCAAAATACCGAAACAAAGCCACTATCG CTCGCAAGCGGAGGAGTGTGTTAGAGCAAAATGATCAAGGCTCTATCTTAAAGCTCCCTCTAATTTGCTGTTG AAACGCTACTTCAGACGCTATCAATCAAGACATGATGCTTTATTTGAACGGATCGCTAAATCATTCAAAACTCC CTAAAAGGGTGCATATTATGTGAGAGGCTTTACGGATGATACGCCCTTTAGTTAAACCGGTTTAAAGCCATTATG AATTAGCCGCCAATCGCGCTTATAGGGTGATGAAGTCTTATACAAATACGGCGTAATCTTAACCAATTTGCTTTT CTTCTACGGCTTACCAACCGTATCGCGCTAACGACTCCCTAGAGAACAGAAATGAAACCAATCGTGTGGAATC TTTTTTCAACCGATGCGAACGATTTGAGTAAATTCATTCTATTGATATGATGATCAATCCCAACAAACAGCAAG AATGAATCGCATGAATAAAATTTATCTTTTAAATCTTTTGTGTTAGCGAGTCTGTTGCTAGAGAGAGGACGCTTCT TCAACCTTTTGTGATTGATAAGGGGATCAACAGAGAACAAATTAAGAGCAGGAGCAAAAAACCGGCTTA AACTGGCTCAAGCCCTTAGTAGCGTTAGAGATTGTCCTCCCAAGAACGCCCTATTAGAAATGCAAGGGGCTAG GGAGTCGTATTATTAAAGGTGAGCGCTGATGAGAGCGGTGTTATCTTAAATAATGACATCAATCAAGGGGCTT CTTGCTCGCTCTAC	2930	SLLALFIALYIAISAVNKSKEALKTEFIK IFNYAPKPEAMQPWVWIPDVGKEEQ MASESSKPAQNTETKATARKGEGSV LEQIDQGSILKLPNLLFENATSDAINQ DMMLYIERIAKIIQKLPKRVHINVRGFTD DTPLVKTRFKSHYELAANRAYRVMKVL IQYGVNPNQLSFSSYSTNPIAPNDSL ENRMKNRVEIFFSTDANDLSKIHSLD NEFNPHKQKE

HP1464	2931	TAGGCGTGAGCGCATTCAAAAACGGCATCATGAAATTTAAATCTAAACGGTGGCGATGTTTTGGTGAAAC GGGCTTTTAAACGGCTAGATCCTACGGAAGAAAAAATTGATCAATGCTTTTAGAGCAATCCAGCCATTCT TCAGGGTTTGAAAAATTCATCGTGAAACCTTAGGGATTGAAAAATGAGAAATTCATCAATAACTGGTATGGCAAG CAAAGCTTGAGTCTTTTGCCAAATAATTTTGCCCTGGAGGCTTGAATCAAGCCCTTGATAAAATAGGCTCTAGCTCT GATGCCAAAGACTTACAGAACTTCTTGATATAAACGACTTTTGGGATATTTAAATCAATGATTGAACAAGCCCC TTAATCAATAAATCATTTCTGGCTGGTCCGAGGATTTGAGCGTTTAGTGAATATCGCTTAAATAGCATCACTA ACCCTAGTAAAGAGCTGACTAGCACCATTTCTAGCATAGGTGAAAAAGCGTTAAATGACTTATTAGCGGATGGCGTA GTGAATAAATCATGAGCAATCAAGTCTTAGGGCAATGATCAATAAATCATTGCTGATAAGGCTTTGGAGCGGTT TATCAGCAAGGTTTAGGCTCCATCTGCTCAATCTTTACAAGATGAATGAAGAAATTTGGCATGGGCTCTTTACTA GGATCTAGGGGTTGCACATCTTTGGCAAGAGGGAATTTCAATTTTGGCTAAAGATTATTTTACTACTAATAAC AGCTCGTTTAGTAACGCCACAGGGGGGAATTGAATTTTGCGCGGCAAGTCTATTATTTTAAACGGGAAAAATAC GATCAATTTACGCG	2932	GVSAFKNAIMEILNSKTVGDVFGENGL LINALDPTERRKKIDQMLLEQIAHSSGF EKFIVKTLGIENVENFINNWWYSGQSLSS FANNFVPGGLNQALDKIGSSSDAKDLQ NFLDKTTFGDILNQMIEQAPL NKLISWL GPQDLSVLVIALNSITNPSKELTSTISS IGEKALNDLLGDGVVNKIMSNQVLGQM INKIADKGGFVYQQGLGSILPQSLQD ELKKLGMGSLLSRGLHNLWQRGNFN FVAKDYLFNTNSSFSNATGGIELNFVAG KSIIFNGKNTINFT
HP1464	2933	TTTTAGAGGTGCTTTTAAGTTGGATTTTCAAAAACGGCTAATGAGATCGATAGCAGTTTGAGAAACTCCATTGAATG GCTTAACAACGGCGGAGAGCTTAAAAACGAAATGAAAGAAATACGAGGGCTTTTTAGCGATTTCATACGAGCA TGCGCACCAACGAGCAAGAGTAAGTGCTACTTTAAACGCTAACACCGAAACATCAAAAGCGAGATTAAAAAGCTA GAAATCAATTGATAGAAACCACTACAGGCTTTTAAACGCTATCAATCTTTTAAACAACGCTAGGATAGCGCT AACAAATCAATCACGGCTAACAAAACCGAAAGCCTTGAAGCGCTAACCAAGCGAAACAAGTGCTAACCAACGAAT AACCGCTAATCAACGCAAGCGCTAATCACTAACGAAGCAAAAGCAACGCTAACCAATCAAAATAACCGAAATAA AACCCAAAGCGATAACTAACATTAACGAAGCGAGAGAAAGTGCTACAAACGCAAAATACCACCAATAAGCAAGAAGTTT TAAACAGCATCACGCAAGAGAAATCAAGCCACAGCGAGATTACTGAAGCGAAAGAGCGCATTTAACGAACCTT TTAGAGACCTTAAAGCCGAAGTTAGCGGCTTTTGGGGGCTTACTATATTCGCAATGTGATTATATCAAGGC GGATGGGAGAAAGTCAAGGATTGAGCGATTACAGCTAGAGAAAAATAGAAAGGAGAGTAAATTTTAGATT GGGAGATTGATGAAGATTGTTTGTGCGGAATTTAGAGTAACGCTTCAAAATGCGAAGAGAAATGAGCATGATAAAT AAATCACAGGACAAATTAAACATGGTTTAAAAAAGTTCAAGAATCCTTTTAAACAAGAGGCTTTAAAGGGTTATAA TTAACTCTCATTGAGCGTATGGGTGTGAGAAAAATAAGTCTCAATCCGTTTAAAGTCTTGATCGGTTCTCATCAAAG ATGAATAACTAAAGC	2934	LEVLLSLDFFKNAEIDSSLRNSIEWLN NAGESLKTMKKEYEGFFSDFNTSMRT NEQVSATLNANTENIKSEIKLENQLI ETTRLLTSYQIFLNNARDSANNQITAN KTESLEALNQAKTSSANNEITANQTQAL TNINEAKENANNQITENKTQAITNINEA RESATTQITTNKQEVLSITQIEKNQATS EITEAKKSAFNELLETLPKFSGLFAGA YYIRNVIFKADGRRKSR
HP1464	2935	CGGTGGCTAATGTGTGCAAGAAAAACTTTTAGGGAAGATTATAACAAGATTGACGCTATAACCAAGAAGCTTT CTAAAACTTATGGGAGTTTGTAAACCAACACGAAAAATTTGTGAGTGAGACCGCTCTAAAAGGAGTGATACCGAT CTTTCTCAAAACGCAAAAATTTAGACACTCTTGCGGATGAAGTGCGCAAGGAAATGAAAGCCAAATTTTACAGGAGCA ATAGGGCAACGGCTGGGTGAGTGGCTTGGCTATTGCGGCAAGCTAACCCCAAACTTATGGCAAAAATTTGGTG CTAACTCGGGCGGAAAGTAGGGGTAAATCTCGCAAGATTGGCACAGCTTTGAGCGGTTCTTGGACTTGGCGG GCCTTCTGCTGCTGCACTATTGGGCTTTGGTTGGAAGCGATGCAGCATTCATATATGATGAATGGCTCCA CAGAGATGATTTCAAAAAGAAATTTTGAACAACATCAACGAAGTGAAGAAACCTCAAAAACAGCTACAAACAGCA ATTTAACGATAGCTTTGTAAATCAGCCCAAGAAATTTCAAAAGAGTTTAAACGCTCCTGTGTGGTGAGAAAAAAC CATCAAGAACAATATAGGCGACCTCAACCAA	2936	VANVLQEKLLGKDYKQRLDAITKLSK TYGSLNQHEKFVSETALKGVDTLSQ NAKILDTLGDEVARKLKANFTGAIGATA GVSGLAIAAKLTPKLMAKIGAKLGAKVG GKFLAKIGTALSGSWTCGPFVPACTIG LWFGSDAAFNIDEWLHRDDFKKEILN NINEVENLKNYSKQFNDSSFVKISQE FQKSFKNAPVVEKTIKEHIGDLNQ

HP1464	2937	AAGAAGAAAGCTAAATTGATAACGGCAGCAAGCTTGTCAGCCCTAATAATGGAGGAGTAATGAAGGCTCA GGCTTTGGCTTGGGAGCGCGATTAGGGAGCGCGGGGGGAGTTTAGGGAGTTATATTGGTAATAAGCTTT TCAATAACCCCTAATTACAGCAAAACGCCAACGACCTACAAATCCCAAGCTTACCAACGCTCTCAAAATTCCT TTTCTAAAGTGCGCCAGTGCTTCAAGCATGGCGGAGCGAGTAAGGACAGAGCGGTTTTTTGGCTCTAGTAG GCCTACTAGTTCAACCGCGGTAAAGCTCTGGGACAAAGGGCTTAACTCATAATTAATTGATCAAGGCTAAAAAT GCAAGTGATTCCTTTAAACCTTTAGACAATAAGACCTTAGAAGAAATCGGCCTAGATTGGCACACGAATGACGACAT GTATGACATGTTGTAGAAACGGCTGAAGAGGCCATTCAAAACGATCGCTTTTTGAATTGGATATTCCTAACGCGCT CATCCCTATGATCAACAGAGTTTTGAAGAAGAGTGCAATGGCATATTACGGGCTTTGATTGGCCGGGGGC TTGATGGCAAGCCTATTAAATTACTGGAATTTAAGCGCTGATACCCCAACCTGCTCTATGAACGGCGGTGATTGAGT GGCGTTACTCAAGCGAATGGCTATGATGAACAAAGCAATTAACCTTTATGAAGCGCTTGGCGAGAAATTTTA AACGCATGGTAACTTTGGCGAAGACACGAGCGGTTTTGAGGAATGTATAGGGGTGAAATCCTTTTTTCAAGC GTTAGGGGGAATATTGAAGAAGAGCGCACCATGGGTTTTTGAAGACGCTGCTCAGAGCGGTGGGATTGAAACGG ATTTTCTTACATTGATGAG	2938	EEEEAKIDNGTSKLVQPNNGSGNEGSG FGLGSAILGSAAGAILGSYIGNKLFNNP NYQNAQRTYKSPQAYQRSQNSFSK SAPSASSMGGASKGQSGFFGSSRPTS SPAVSSSGTRGFNS
HP1464	2939	CAAAGCAGAAGCCACACAAGAAATAAACTAAAGAAACAATAAGCCAAAGAAACAAATTAAGAAAGCAAAAT CAAAGAAGCTAAAGCGAAGAACCTATTCTGTTAAAGCTTAGTTTAATGAAGCGTTAGAAAGAAATTTGTCGCTAA TTCTTAAGCGATTGCGTTTCTTAGTCCATCATTCAATCAGCGGAAAGTCCCACCTAGCCCAATCAAAAA AATCAAGAAATTGTCCAAATAACCAAGAAATAGTCAGCTTTCAGAAATACGCTAAACCACTCAATGCGATTGA CAAGATTAAACCAAGCAAGCAAGCAAGTTTAGATGAAGAAATGAAGATGGCTATGACTTTTGAAGAAAA GGATTTTTAGAGTGAGCAGAGCGATAGCCAGTGCGCATGTTTGGCGGAAATGGGGATATAAACTTTTAA GCAAGATGAAGAGATTGAATTGAGCAAGCAAAATCCGCTTGGTGAAGACATATTATAGACGCGATCTGCTCGGTG CCGTATTTGATTGATTTATCTAT	2940	KAEATQENKTENNKAKESKIKESKIKE AKAKEPIPVKKLSFNEALEELFANSLSD CVSYESIQISAKVPTLAQIKKIKELCQK YQKKLVSSSEYAKKLNDAIDKIKKTEEKQ KVLDEELEDGYDFLKEKDFLEWRSRD SPVRMYLREMGDIKLLSKDEEIELSKQI RLGEDIIIDAICSVPYLIDFIY
HP0011	2941	CGCTAAATTTCTATTTATTTATCAAACTTAGGAGAACTAATGAAGTTTCAGCCATTAGGAGAAAGGGTCTTAGTA GAAAGACTTGAAAGAGAGAAACCAACAGTTCAAGCATCATCCCTGATACGCTAAGGAAAGCCCTTTAATGGG CGTAGTCAAGCGGTTAGCCATAAAATCAGTGAGGGTTGCAATCGTTAAAGAAAGCGATGTATCGCTTTGGCA AATACAAAGGCGCAGAAATCGTTTTAGACGGCACTGAATACATGGTGCTAGAACTAGAAAGACATTTCTAGGCATTGTG GGCT	2942	AKFLFYLSKLRRTNMKFQPLGERVLVE RLEENKTSSGIIPDNAKEKPLMGVVK AVSHKISEGCKVCVKEGDVIAFGKYKA EIVLDGTEYMWLELEDILGIVG
HP0011	2943	GCACCTCTAAAAAGAGAGCCGATAAGGGATTAAAAAGGTGTTCAAGACAGCAAAAGACGCTTGGGGTTTCATC TATGAGATCAGCGAGTTTCATGAAAGCCTATACCGCATTGCTAAAAAACAAGACCGATAGCTATTATTGAGGTAT CTCCCTCTAGGTATTGGCCAGCATTTTAACGACTGCCCTTTATGTCAATACCCGATTTGACGCTTTGAAAAAG CTTTTGGTGCTTATTACCAAACTTGGATTGAGGAGCGACGATCAAGCAACCAAGATCAACATT ATCAAAACGTTAAAGCAATAAGAGCGTTGAACCATCAAGAGCTTATTAATGATAGCATCGACTCTTATAACACC TTTGATCAATACCTCTATACTTATGGATAGCTCTTCTGTTATCATAGCAATGGTGCGTCTGCTTAGCCCTA GCTAATTTTATGCGAGATGAAGAAACCCATTATCGCTATGGATGCCGAACCCAGTGGAGCATATTTTG CCACAAACGCCCAAGAGGAGTCAATGGAACGCGGATTTGACAAAGAAAAAGAGAAATGGGTAAATATAT CGCGAATTTAACCTTTTAAAGCGTAAAGAAAGACGCGCATGCTTTAAACGGGATTTGATGAAAAAAGAAAA	2944	TSKKRADKGLKKVFKDSKKDAGCFIYEI SEFMKAYTALLKKQDRYVYLLRYLPSR YWASILTALYVKYPDFDALKLLVSY YQTWIAGGTITRIKQTSINIKNVKSNS VETIKELINSIDSYNTFDQYL YNLWDS SSVYHSHKWRPVLALANYFMADEEK HFIAMDAETQVEHILPQTPKRGSQWNA DFDKEKREEWVNNIANLTLLKRKKNNAH ALNGDFDEKREK

HP0496	2945	GAGCATTGAGTCAAGAAGAGATCCGAAACAAAGTAGATTTCATGGAATTTCTTGACAAAAATAATACTAAATTAGACA ACCTGAGCGAAGAGAGAAAGAAAATTCCAAATGAGATTGAAGATTTTCAAAAAGACTCTAAGGCTTATTTAGACG CCCTAGGGAAATGATCGTATTGCTTTTCTAAAAAGACACAAAACATTCAGCTTTAATTACTGAGTTAATAATG GGATTTGAGCTACACTCTCAAAGATTATGGGAAAAGCAGATAAAGCTTTAGATAGGAGAAAATGTTACTCTTCA AGGTAGCCTAAACATGATGGCGTGATGTTGTTGATTATTCTAATTTCAAATACCAACGCTCCAAGAATCCCAA TAAGGGGTAGCGGCTACGAATGGCGTTTCCCATTTAGAAGCAGGCTTTAAACAGTAGCTGTCTTTAATTTCCTG ATTTAAATAATCTCGCTATCAGTATGTTTCGTAAGCGGAATTTAGAGATAAACTAACCGCTAAAGGATTGTCCCTAC AAGAAAGCTAATAAGCTCATCAAAGACTTTTGAAGCAGCAACAAGAAATGGCTGGAAGAGCTTTAAACITTCATAAAG CTGTAGCTGAAGCTAAAGCAGGCAACTATGACGAGGTGAAAAAGCTCAGAAAAGATCTTGAAAAATCCCTAAGG AAACGAGAGCATTTGGAGAAAGAGTAGAGAAAAATTTGGAGAGCAAAAGCGCAACAAAAATAAAATGGAAGCAAA AGCTCAAGCTAACAGCCAAAGATGAGATTTTGGCTTGATCAATAAGAGGCTAATAGGGATGCAAGAGCAATCG CTTACACTCAAATCTTAAAGGCATCAAAGGGAATTTGCTGATAAACTTGAAAAATCAGCAAGGATTTGAAAGACT TTAGTAAATCTTTGATGAATTCAAAAATGGCAAAATAAGGATTTTCAGCAAGGCAGAAACGCTAAAGAGCCCTTA AAGGCTCGGTGAA	2946	ALSQEEIRNKVDMEFLAQNNTKLDNL SEKEKEKQNEIEDFOKDSKAYLDALG NDRIAFVSKKDKHSHALITEFNNGDLSY TLKDYGKKADKALDREKNVTLQGSCLKH DGMFVDYSNFKYTNASKNPNKGVGA TNGVSHLEAGFNKVAVFNLPLDNLNLA TSFVRRNLENKLTAKGLSLQEANKLIKD FLSSNKELAGKALNFNKAVAEAKSTGN YDEVKKAQKDKLEKSLRKREHLEKEVEK KLESKSGNKNKMEAKAQANSQKDEIF ALINKEANRDARAIAIYTCNLKGKRELS DKLEKISKDLKDFSKSFIEFKNGKNKD FSKAEETLKALGGSVK
HP0136	2947	AAAGAACTGAGCTCTGCGATGGAGACTGAAATCAATTTGCCCTTTATCACCGGAGCGTACCGGGCCTAAACACTT GGTTAAAAAACTCAGTAGGGCTAAATTTGAAAGCTTGACAGAAAGATCTCATGAAAGAAACGATTTCTAAATGAAAG CGTGATCAAAGATCGGGGCTAACCAAATGAGATTTGAGAAAGTGGTGATGGTGGGAGGCTCTACTCGTATCCCT AAAGTCCAAGAAAGGTGAAAGCGTTTATTAATAAGATTTGAATAAAAGCGTCAATCCTGATGAGGTCGTAGCGGT GGGAGCGAGCATTCAGGGGGCGTGTGAAAGCGGATGTGAAAGATGTGCTTTTATTAGACGTTACGCTTTAAGC CTTGGGATTGAACTTTAGGGGGCGTGATGACTAAAGTGATTAGATAGAGGCACGACTATTCGGCGAAAAAATCTCA AGTGTTCTCAACCGCTGAAGACAACCGCCGCTGTCTCATTTATGTTTACAAGCGCAGAGAGAAATGGCAAGG GATAATAATCTTTGGTAAATTTGATTGCAAGGCATCGCTCCAGCTCCAAGAGGCGTGCCGCAAAATTGAAAGTAAC CTTTGATATTGACGCTAACGGGATTTTAACCGTTTCAGCGCA	2948	KELSSAMETEINLPFITAIDATGPKHLVK KLTRAKFESLTEDLMKEIISKIESVIKDA GLTKNEISEVMVGGSTRIPKVQERVK AFINKDLNKSVPDEWAVGASIQGGV LKGDVKDVLLEDVTPLSI.GIETLGGVMT KVIDRGTTIPAKKSQVFSTAEEDNQPAV SIMVLQGERELARDNKSGLKFDLQGIA PAPRGVPQIEVTFDIDANGILTVSA
HP0136	2949	AGAAATCCATGTGGATTTGCCACGAGCGCTAGGATCTTAAACAAATCACGCTCACTTACCAAGATATTGATGGCT CTATCCATTCTAAAGTCGTGGCATTGATAAAGGCATTGATGGCATTACCCCTTAAACCTCTCCCAACACACCCCTTG ATCCAGCCGCTTTGAAAAACGCTACAGATCCAAGACTTTGATTTTAAATGGCAAGCAACACGATGATTTTGCGTT CCCCTTATAAAATTTACGCTCCTTTGTGCTAGTCAATCCTATAGAATCGTTAGACACGCAAAAGGCCCTTTGG ATATTTATCAAAACATGGATTTAAACCAGAAAGTTTTTCTCACATTAAGTCGGCAGCACAAAGATTATTACCGCAT CACGCTCATTTAGACGGGAAATACCGCTATCTTTGGAGAAAAAACCGGGCGTATGAATTAATAATTGAAATAAAA GCATGCAGCATTTAGTCTTAATCGGTTTTATGGGAGCGGTAAAGCTCTTTAGCGCAAGAAATGGGCGTAGCTTTG AAATTAGAAAGTTGGATACGGATATGATCATTAGCGAGAGGGTGGGCTTGAGCGTGAAGGAGATTTTGAAGAGCT TGGCGAAGACAATTTCAGGATGTTTGAAAAAAATTTGATTGATGAATTAATAAACGCTCAAAACCCCCCATGTTATTTCT ACCGGTGGGGCATTGT	2950	EIHVDLPTSARILKQITLTYQIDGSIHS KVVGIDKGIDWHYPLKLSQHTLDPAAF EKRYQIQDFDLMASNTMILRSPYKILR SFVLNPNYRIVLDTQKGP'LDIYQNMDL NQKFFSHIKVGTCHKDYRITLILDGKYR YLLEEKNGAYELKIK
HP0136	2951	TTTAAACCCAAAGAGCGGAAATTTATAGAAAAATTTTCCAACAAAAAGACATGCAAGAAATGCTAGGGCTTTTAA ACCAATTTATTTTGCAAAAGCTACAAGGTAGAAAAGGAATTTAAAGATTATAAGCCCTTTATGAATGGGTCATAGAGAT TTTACCTCAAGCCATTTGGGTGGTGAATGAAAACGGGAGCTTTTATAAAAATCTTTAGCCAAATCAAAGCCCATGA GGTGTTCATTAAGGCTAAATTAGAAAAATTTAAACACTGAAATTAACATGAAAAATAAAGCTATTAGTCCAGCAAAAC AGCATTCAAGGCAAGCAAAATCATCACCCGCAACCGATATTAGCGCTCAAAAACGCCAAGAGCGGCTCGCTTCTATGG GGAAATCTCAGCGCATTTAGCCCATGAGATCAGAAAACCTGTAGGTTCTATCTCTCTTTTAGCTTCAGTGTATTAA AGCATGCGAACGAAAGACTAAGCCCATTTGTGTAGAAATGCAAAAAGCTTTATGGCGCGTGGAAAGAAATCATTA GCCACCTTGCTTTTCTAAAGGCATTCAAGCCCAACCGCAAGCAAGTTTGAACACGCTAGAGAGCGATCTCAA AGAAAGCCCTAAATGCTACACTTACTCTAAAGACATTTGATTTCTTTTAAATTTAGCGACGCAAGAGGGTTTTTTGAC TTTGATTTGATGGGGATTGTGTGCAA	2952	FKPKESDLLENFSNKKJMQELLGILLN QFILQSYKVEKEFKDYKALYEWVIEILP QAIWVNVNENGSGFFYKNSLANQSHVEF NIKAKLENFNTEIEHENKSYLVQQNSIQ GKQIITATDISAQKQERLASMGKISAH LAHEIRNPVSGISLLASVLLKHANEKTK PIVVELOKALWRVERIIKATLLFSKGIOA NRTKQSLKTLESDLKEALNCYTYSKDI DFLNFSDDEEGFFDFDLMGIVLQ

HP0136	2953	TAATGATTTGGGCTTAAAGAAATCGGTTTTAAATCCGTTTATGAAGCGCGCTTCACTTCCCCAAGCCCCATTCAAGA AAAGGCCATTCCGGCTGTTTTGCAAGCGCGAGATGTCATCGCACAGCCCAAGCCACAGGCACAGGAAAAACCGCCGCT TTCGCTCTGCCATTATCAACAACCTTAAACAACACACACCATAGAACCCCTAGTGATCACGCCACCCAGAGAAATTA GCCATGCAAAATAGCGATGAGATTTCAAATTTGGCAACACACACAGGACTAAACCCGTGCGGTGATGGAGGCCA GAGCGTTAAAGCAATGCGAAATTCATTAAGAAAAATCCCAAGTATGATCGCTACACCAGGAAGGCTGCTCGATC ACTTAAAAACGAACGATCCATAAAATTTGCGCTAAAGTGGTCTTTAGATGAAGCGGATGAATGCTGGATATGG GGTTTTAGACGATATTGAAGAGATTTTGAAGTACCTCCCTAGCAAGCGCAGATTTTGTCTTTTTCAGCCACGATGC CAGAGCCGATTAAAGACTAGCGGATAAGATTTAGAAAAACCTATTAAATCCATATCGCTCTCTTAATACACTAA CACCACATCACCAACGCTTTTATGTGATCAATGAGCATGAGAGGCGGAGCGCATGCGCTTTTAGACACCCC AAGCACCCAAAGAGCATTGTTTACGCGCCTAAAGAAAGAGCCGATGAATGACCAATTCCTTCTGCTTCTAA ATTACAAAAGCAGCGCTTGCATGGGATATGGATCAAGGGATCGGCGCTCTTCTATCATGCGGTTTAAAAAAAT GACGCTGATGTTGGTGCTACAGATGTGGGAGTGTGGGCTAGATATTAGCGGTGTAAGCCATGTGTTTAAATTA CCACTTGCCTTAAACACTGAGAGCTATATCCATCGCATCGGAGAACCGGGCAGCGGCAAA CCAAACCTCCTGTTTATTGGACATTCCTTCTTTAGACGTGAAAAATCTACGATTAAAGATTTGAAAGACGCGA TCAAAAACGCTTCAATAATGAAGTGATGTGGAATTTGAAACAAACGGCGTTTGAAGGATTATTGACAAATCTTCTA AAGAAATCGCTATTCTTTGCTTTAAGCGCCTAGATGCTAAAGGACTAGAAAGTGGCGGTATCCCTACTATAAC GCGAGCGAATACCAAAAACCTACTTCAATAAAGAGGGCAAAATAGAAAGCAATGTCGCTCAACCCGCTCAAAA TGGCGCAGCTAATGGCTCTACTAACTGAGTGAAGCGCTAAGGGAGTTAGAAAATAGCGTTTTTAAACATGAAT TAAACGATGTGAATGGCTTATTTTGAAGCGCAATGAATGGATAATAATAGGGCTTTTGTGAGCCTCCCTAATG GCAT	2954	NDLGLKESVLKSVYEAGFTSPPIQEK AIPAVLQGRDVIQAQGTGKTAAAFAL PIINLKNHTIEALVITPTRELAMQISD EIFLKGKHTRTKTVCVYGGQSVKKQCE FIKKNPQVMIATPGRLLDHLKNERIHKF VPKVAVLDESDEMLDMGFLDDIEEIFD YLPSEAQILLFSATMPEPIKRLADKILEN PIKIHAPSNTITDITQRFVINEHERAE AIMRLDTQAPKKSIVFTRTKKEADELH QFLASKNYKSTALHGMQDQDRRSSI MAFKKNDADVLVATDVASRGLDISGVS HVFNYHLPLNTESYIHRIGRTGRAGK
HP0136	2955	CCAAACCTCCTGTTTATTGGACATTCCTTCTTTAGACGTGAAAAATCTACGATTAAAGATTTGAAAGACGCGA TCAAAAACGCTTCAATAATGAAGTGATGTGGAATTTGAAACAAACGGCGTTTGAAGGATTATTGACAAATCTTCTA AAGAAATCGCTATTCTTTGCTTTAAGCGCCTAGATGCTAAAGGACTAGAAAGTGGCGGTATCCCTACTATAAC GCGAGCGAATACCAAAAACCTACTTCAATAAAGAGGGCAAAATAGAAAGCAATGTCGCTCAACCCGCTCAAAA TGGCGCAGCTAATGGCTCTACTAACTGAGTGAAGCGCTAAGGGAGTTAGAAAATAGCGTTTTTAAACATGAAT TAAACGATGTGAATGGCTTATTTTGAAGCGCAATGAATGGATAATAATAGGGCTTTTGTGAGCCTCCCTAATG GCAT	2956	PNLPVYLDIPILLDVKNSTIKDLKDAIKK RFNEVDVEIETNGRLRIIDNSSKESPI SLALSALDAKLEVAAGIPTNNASEYQK TYFNKEGAKLESNAQTAQNGAANGS TKLSEAAKGSLENSVFNMKLNDVNLGF LEAQMNLONNGAFLSLPNG
HP0136	2957	TTTTGAAGTGATAACAATACCGACTCTAGCGAGTTTATAGAGGCACCAACACCATAGGCTAAAAATGGGCTC CAGGAGGTACAGAAATTCGCGGGCAAAAGGGCAAGACAGATCATTTGCTGCGCACCAAGCAAGCGAGTTTT TGAGGTGATGAGTTGCGCTTATTTAGTGGAACCTAAAGAAAGGTTAGCCTTAAAGGGGGCAAGGGGGG TTAGGGAATGCACATTTTAAAGCGCGACTAAACAACACCCACTACGCGCAAAAGGCTTAGAGGGGTTGAAAA ATCGGTGCGTTTGAATTAACCTCATCGCTGATATAGGTTAGTGGCTTCCCTAATCGGGTAAATCCACGCTCA TTCCACCATCTTAACGCTAAGCCTAAATCGCTAATGATTAATTAACGCTAGTGCCTAATTTAGGGTTGTGA GCGTGGATGAAAAAGCGGATTTCTAATGGCGGATATTCTGCGATTTAGAGGGCTAGCGAGGGAAGGCGCT AGGGATTAGCTTTTAAAGCATATTGAACGCAACCAAGTTCTAGCTTTTGTGAGCGCTTCCAGGCTGGATTAGG CATTAAGAGCAATACCA	2958	FEVDNNTDTLASFRGTHHKKAKNGAP GGTRNCAGKKGEDKIIVPPGTQVFVG DELWDLVEPKERVALKGGKGLGN AHFKSATKQPTYAQKGLGVEKCVR LELKIADIGLVGFPNAGKSTLISTISNA KPKIANYEFTTLVPNLGVSVDEKSGFL MADIPGIEGASEGKGLGISFLKHIERTK VLAFLDASRLDLGIKEQY
HP0136	2959	GCCCCAAGACTCACTTATAACGGGCTAGATGAAAGAAAGAAAAAGAAAGCGGAGTATTTAGACGATAAGAAATAAT ACAATTTACCATAATCCAGCAATAACACGAATTTTAAAGCGGTGCTCGCAAAAAAGAGCGGAAGATTTAGAGATT GTGTTAGCGCTCGAATCATTAAAGTGCTAGAAAACGGGAATTTTTCATCTATGGAAATAAGGAAGTCTAGTGGA TGGGAAAAAGCAATCCTTAAGGTGATGGGTGATCCGCCCTTATGATATTGAAAGGAATAAACACCATCCAATCCA AGTTTTAGCCGACGCTAAGATTGAATACACGAATTTAGGGCATTTGAGCGATTCCAATAAGAAAGAAATTCGCTGCTG ATCGGATGGAACCCCAATGCCTTATTAAAGAGCAAGCAAGCCTAGCATGAGAGCGATCGCTATTGTTTAGCCAGAA GTTCCAGTAAAGGATCAAGATAAAATATTATTGATTTTCAATAAACCCATGCTCGCT	2960	PPRLTYNGLDERKKKEAEYLDDKNY NFTKSSNNTNFKGGGQKKSEDLIVL SARIKVLNGNYFIYGNKEVLVDGEKQ ILKVSQVIRPYDIERNNTIQSKFLADAKI EYTNLGHLSDSNKKKFAADAMETQMP Y
HP0136	2961	GTTCCAGTAAAGGATCAAGATAAAATATTATTGATTTTCAATAAACCCATGCTCGCT AAGGCCATTTCCCAACAAAGATTCAAGCTAAAATTGAAGAAATAGCGGAAACTATGAAACGCCATTATTGAAGGC AAGATTGTAGCAAGAAATAAGGGGTTATATCGTGAGTCTCAAGGCTGAGTATTTCTCTCCGCTCGCACTC TTCTTTAAAGAAATGACGCAACCATATCGCAACCGCTTAAAGCGTGCATCTTCTGTGGATAAGGAAACCATTC TATCAATATTTCTCGCAACGATTCTTTGAAGTCAATGACAAACGCAACTTGAAGTTCTAAGGAATTTGTAAGAGC CACAGAGCCGTTGAGGGTTGTCGCCAGATCACCTTTTGGCATTTTGTAGAACTAAGGGGATTGAGGGC TTGGTCCATTATTCTGAATCAGCCATAAGGGACCACTCAATCTGAAAAATACTACAAAGAGGGGATGAAGTCTAT GTCAAAGCCATCGCTTATGATGCAGAAAAAGACGCTTCTCACTCTCCATAAAGCGACTATAGAAAGCCCATGGGA AGAGATTCAAGACAAAGCTAAACCCGATAGGCTAAGGTAGTGGTGAACCAATTAACATTATGGGTGTTTG TGGATATTGGTAATGATATTGAAGGCTTTTGGCATTTTCTGAAATCTCTTGGGATAAAATGTCAGCCACCCATAACAA TTACTTGAGCGTGGGCAAGAGATTGAT	2962	KAISQKQIAKIEELGENYENAIIEGKIV GKNKGGYVIVESQGVYFLSRSHSLKN DANHIGKRVKACIIRVDKENHSHINISRK RFFEVDNKRQLEVSKELEATEPVLGV VRQITPFGIFVEAKGIEGLVHYSEISHK GPVNPKEYKGEDEVYVKAIAAYDAEKR RLSLSIKATIEDPWEIQDKLKPGYAIKV VVSNIHYGVFVDIGNDIEGLHVSSEIS WDKNVSHPNNYLSVGQEID

HP0136	2963	ATTGAAAATTCAGCGCGCTAGAAAGGGAATTGAAACAAAAGAAATGAACATTTAGAGAACGCTTTAAAAGAGCAAGA ATATTTGAAAACGCGATGGCTTTTAGAAATGGAACAAAAGAAATCTTTACAAATAAAATTTGGAATTTGGAATAA TCCTACCAACAGCCCTAAATATCTTAAAGAGCGAAGTCGCTTCAAAAGATAGCTAGCTCCATGCATAGAAATCCAT AAAGCGAGCGAAATTTAAGCAACACAAACCAAGAGATCCCAAAATGATAACGAACCTTTCAAGCCCAACGAA AAAGCGCGCTACAAGATGAAAGCGTGCTGATTGTACAAATTTAGACAAGGCTATTATTGGATAGAAACCGAGCT TGGCATGCGTTTAAAGCGCATGGGAGTTTGTGAAAAAATCCAAAACCCCTAAAACAAATTCAAACCCCTAA AACACCATTCCTAACCTAAAGAGCGAGCTTGCGCTTGATTTAAGGGGCAACGAGCGAAGAACCCCTGGAT TTACTAGACGCTTTTAAACGAGCGGCTTTTAGGGGCTTTGAAGAAGTGCTGATTTGCCACGCGCAAGGGAGCGG GATTTAGAAAAGTTTG	2964	IENSSALERELKQKNEHLENALKEQY LKNAWLLEMEKQKEIFHNKKLEKSY QQALNLIKSEVASKDTSSMHKEHKAS EILSKHKTNQEIPQITNFQANEKARYK NESVLIVQILDKGYWIEITELGMLKAH GSLKIKIOPKPKNFPPKTTIPKPKEA SLRLDLRGQRSEALDLDLDAFLNDALL GGFEFVLICHGKGSGILEKF
HP0136	2965	CAACTCCAAACCCATTTGATAAAAAGAGCGCATTTGAAGCATTTAGAGCAACACAAAGAAATTTGTAAGAGAT GAAAACGCTATTTAGAAAAGGAAAAGAGCTTGAAAAGAACGCCAAATTTTAGAACAAAGAAAAGAAATTTT AAAAACAGCGCGCTGTTGTAAAGAAATCTCAAGCCAAAGCGCTAGACGCGATGCTCAATTACATGGCTTATACTAA AGATGAAATTTAAAGCATGATTTTAGAGCAATTAGAGAAAGAAATAGAACCCCAAAAAGCGCTTAATCAGCGGTTA TGAAAAAGAGCCAAAGAGGGAAGAAAATCGTATGCCATTTAGCGGAAGCGACAGCCGCTTTTGGCGGT AATTATGCGGCAGAGAAATTAACAACCTGTTATGCTTGGCTGCTCAGATTATATCGGTGCTGTGATAGGCAAGAC GGGAAAATATTGAAGCGTTTAAAGGTCAGCGGGTGATATAGAAATTTAGCGAAGATAGCAGCGAAATTGTGTTT GTCCAGTTTCAATCTTATCGCGGTGAAGTAGCGGAGCGCTTAAATTTAATAGAGACGGCCGTATCCAGC CTAACAGGATTGAAGAGGTTTATCATAGATCGCGGCAACCTGGAAAAGAAATTTGCTTCTGAAGGGGAGAGCGT GGTGTAGAATTAGAGCTTGAGCTATGGAAGAT	2966	QLQTHFDKKEAHLKHLEAQHKEFVRD EKRYLEKEKKELEKERQILEQEKENFK KQRAVCKESQAKALDAMLNMYATKD EIKSMILEQLEEELEAQKSALIRRYEKE AKEEGKKSYAILAEATARFAGNYAAE NLTTTRIALPCSDYIGRVIGKDGKNIEAFK KVSVDIEFSESDSELCLSSFNLYRRE VASETLKILIEDGRIQPNRIEEVYHRVAR NLEKELLSEGESVWLELELGAMED
HP0136	2967	TTTGAATAAAGAGCCTTTGAATGAATGCATTGAAGCGTGCGTGTAAAGATTGATGGCAACCAATACCGATGATTT AAGCCAGCGAGCGAGCGCTTTACACGAAGCGATATTCCTTACACGCCCAAGCCATGCTAAAAAACCGGATGAAA ATTACGAACAACGCATCAAAAGCCATTAAACTAAAGCGTTCCTGTAGCGTATGTGGCGATGTGTTGGCACAGGA AGCTCCAGAAAAAGCGCGACGAACCTCTATCATGTGGCATTTTGGTAAGGACATTCCTTTTGTGCTTAATAAAGGAG TGGGGCATTTGTGATTGGGGGGTGATCGCTCCGATTTCTTGGCACTTGGAAGATAGCGGGCGTTACCCATT GTGGCTGATGTTAAGGATCTAAAGAGGGCGATTGATTAATCTATCCTTATAAGCGCAATCACGCTGAACGAT AAAGTGGTTAGCATTTTAAGTTAGAGCCTGAACTTTGTAGATGAAGTTAGGCTTCTGGCGGTATCCCTTTAATC ATCGGTAGGGTTTGACGAATAAAGCGCGTAATCTTGGGGTAGCGGAATCTGAAGCGTTTAAAGGCCATCCG CTCCTAAAGCGACGCCAAAGGCTACACTTTAGCCCAAAAATTGTAGGCGATGCTTGTGGGTAAAGGGATCTTA CCTGGGACTTATTGTAGCCAAAGGTTACACCGTGGCAGTCAAGACACAGCGGCGATGACTAGAGATGAG GTTAAAGAGTTAGCGAGTTGAAGTTTGTAGCGCTTTTGTGTCAGAGTTTGGCATAACCGCGCTTACCCAAAG CCTAGCGATGTGAGTTGCATGCAACCTTGCTGGCTTATCACTCAAGAGCGGTGTGGCGTTGCATCCGGCGG ATGGCGTGATCCATACATGGCTGAATCGCATGGGATTGCCGTGATACCTTAGGCACAGGGGGGATAGCCACACCCG TTTCCCTTTGGGCATTAGTTTCCCCG	2968	LNKEPLNECIEACVKIDGETINTDLS ASDAFTRSDIPLHAKAMLNKFNIEYEQ RIKAITKGVPAVYVGDWVGTGSSRKS ATNSIMWHFGKDIPFPNKRSGGIVIG GVIAPIFFATCEDSGALPIVADVLDLKE GDLKIYPYKGEITLNDKVSTFKLEPET LLDEVASGRIPLIIGRGLTNKARKFLG LGESEAFKKPSAPKSDAKGYTLAQKIV GHACGVKILPGTYCEPKVTIVGSQD TTGAMTRDEVKELASLKFDAPFVLQSF CHTAAYPKPSDVSLSLHATLPGFITQRGG VALHPGDGVIHTWLNRMGLPDTLGTG GDSHTFRPLGISFPAGSGLVAFAAVTG TMPLNMPESVLVRFKGMNFGITLRL VNAIPYYAIKKGLLTVEKKGKIVFNRI LEIEGLPDIKMEQAFELSDASAIERSAAA CVVRLNKEPMIEYLSNKLIDEMIASG YEDKETLKKRRDAMQAWVDNPNVLEP DSNAQYAAVIEIDVAEITEPILACPNDPD DVATLSEVLADTTGKRPHADEVFIGSC MTNIGHFRAFGEIVKNAPPSQARLWV PPSKMDEQELINEGYAIFGAAGARTE VPGCSLCMGNQARVRDNAVWFSTSTR NFDNRMGRGAKVYLGSAELGAACALL GR

HP0136	2969	GGCTTTAGAAGAGGTAAAGTCCCCCTTAGCTTAGTGAAACCCGTTATCAAGCCCAATTGAACAAGACGCTCAAGA AGAAATGATTCAGAGAGGTTTGAACACCGCTTTAAGGAATTAGGATTGAAATAGGATCTCATCGCAGCCCA TCTCACTAAATTTGAAAAAAGACACGCAATTTGAAATAGAGCGGACATCGCTTAAACCCACGATTGTTTGA CAAGATCAAGAGAGTGGCTAGCGTGGAGTGGAAGTCCAAATGAAGAAAAATGATGAGCGTTTGAACAG CTCGCTAAAGATTATGCGAAATTTGTGGATACCAACACTCAAGAAAAAGCTCAAAATGACGATAAATTACGATTGAT TTTGAAGGCTTTATAGATAATGCGGCTTTTGAAGGGGCAAGGCTGAGAAATTTCAATTTGATTTAGGCAGTAAGCAA ATGCTAGAAGATTTTGAAAGGCTCTTTTAGGCATGCAAGCGGTGAAGAAAAAGAAATCCCTTTGACTTCCCTAGC AAATACCGCAGAGCATTTAGCCGGCAAGAGCTTTTAAAGTGAATACACGATTCAGCGCGTGAAATG TTAGAAATCAATGACGAACCTCGCTAAATCGTGTAGCTAATGAAGAGATCGGACTTTAAAGCTTTAAAGAAAGG GTTGAGGGGCGAGTTGTTTTAGAAATAAAGCCAGGCTCTATAATGAAGAGTTGAAAGAAAAATGATTGAAATTTA GATGAAAGAGATTGTTTTGATTGCTTAAACGATCATAGCAAGAAATGGATTTGTTGTTGAGGAAAGCTCTTTATT CCATGCAAGCTGAGGAAGTCAATCTTACAAGAAAGTCAAGAAAAAGCCAAAGAAAGCGTGAGAGCTTTAGGAAT GATGCGACAAAAGCGTGAAATCACCTTTATCATTTGA	2970	GFRRGKVLPLVKTRYQAQIEQDAQE EMIQEVLKNAFKELGIENKDLIGSPNLT KFEKKDTHFEIEADIGLKPTIVLDKKEC VPSVGVEVPNEEKIDERLKLAKDYAK FVDNTQKKAQNDKLTIDFEGFIDNA PFEGGKAENFNLIJGSKQMLEDFEKAL LGMQAGEEKEFPLTFPSKYHAEHLAG KEAFFKVLHQIQAAREMLEINDELAKIV LANEENATLKLKERVEGQLFLENKAR LYNEELKEKLIENLDEKIVFDLPKTIIEQE MDLLFRNALYSMQAEEVKSLQESQEK AKEKRESFRNDATKSVKITFI
HP0136	2971	TATTGAAGTGGTGACATAAGACTATAAAGATGTTATTGCAATGGAAAAAATTGATAAAACATGCCACTTTTATT GGGATCACGGATTTGGACAAAGTTGCTGAATTTACCATTAGGTTTGGGCAAGATTGAAGACGGAATCTTTAA TGTGCGCAGCGAACTCATTGAACGCATCAAAACGCCCTAGACGCTAACACATTGAAATCCCTTTCAACAAGCTAG ATATTGCTATTAAAAATCAAGACTCTCCTAATGATTGGTGAGATGATTGATTGAGCAGTACTTGAATTTTAAAG GAGACCCACATCAAGCAGCAGGTATGCTGTTAATGGAAAAATATAACGATAAAATGAAGAGGTTTAAACGATG AGCTAACCTACTATTAAATAAACCATTAAAGAGTGGGTATACATCAATTTATGGCTTTAGAAAGTAGAAAAAA TCTAAAAGCTAAACAAGAGCAAGAGAACGCGATGGCATAAGAGCCATCGCTTGGCAGTGAAACAAAAGAAAAAG GAAACAACATGGGAAAAATGAACAAGAAACAGCGATTGACTATGAAAAATTAGCGAATCATTTGGAATAATAATGATG AAACAGCGAAGCACTAAACGCTTTTGCAGACGCTTACCTTTATAACATGAGAAAAAGAGTCAAAAGATTCCGGCA ATAGAGATAAGTTCTTAAACAAGGCTTGCATGGGAGAAATTTACCACAAAAACCCAAATTTATTAACGATCGC TCCAAGGAACCAACGCCCATGACCTCAAGAAAAAGAGAAATAGCTTGAATCGGTGAGATCAGCCCTCATACCAATTT TGGGTAGGATAAAACACCTTATCCTAAAATATTTGATTCATTAATCCTATCTAAAAATATTAATCTGATTCTAAAA TTCCCTCTAACTCTTTAGTGAGATTGCAATTTCTTCAACTCTTTAAGAGTAAGCTTATAATTGACTTGATTATGGGA TTCATTG	2972	IELVHKTIKVIDAMEKIDKNMPTFIGTD FGQSSLNFTIRVWAKIEDGIFNVRSELI ERIKNALDANHIEIPFNKLDIAIKNQDSP K
HP0136	2973	ATTGAAAGGGTGATGATGAGTTTGTGTTTGTCTGTACACGAAAGCTAATTACGAAAAACCTTATTACGATACAGAA TTTTGCGATTAAAGAAAGCGAGCGGCTATTTCCGGACATTGATGAAGCGGCTTTTACGGATTGCAAGATTAT TTTAATTCATGAAAGAAATGCTAAAAAGCCCAAGACTCCGCTCAAAACAGGCTCTGCTCAAAAAACAGAAAGCT TTAACGCACAACATTAAAGACACAGAGAGGTTAACGACCTTACAGCACAAAGCGAGTGAAGAAATTAAGAAAGCGT CATTAAAGAGTCAATAGCTTGGTTCTCAATCGCTGAGATTAAACAACGCAATTAAGAAAGTGGAAAAACAAGAG TTTAAAGCATGCGAACGAATTAAGGATAAGCGGATGAATTTGCAATTTGCGAGAGCTTTTAGGGGGAATG TTTTTAAAGCAGCATTAAAGACTCATTGCTCACCATAAAGACTCAGCGGATTTGATGAGAGCTATAACCTTAATAT CGGCATGGTTCAATATCATGATGGCTCTATTTCCATCTTGTAGTGAAGAAATCCGAAAAATAAGGGGGTT GAACCGGTTTATTTTCAAGCGGATGATTTTAAAGTTACTAATATTACTGACAAAGCTCAATCAGGAAAGAGTGGGGC GTTATTGAATGTGATAATGACGGCTCTAAACGGGACTTTAAAGGGCAATTAACAGATTATATTGATTGTTGGATTCT TTTGCTAAGGGTTTGATAGAATCCACTAATGCGATTACGCTCAAGCGCGAGTCAATATTGAGGGCGAGCCGGT GGAGTTTAAAGCGATGAAGCCTTTAAAGACACTAACTACAATATCAAAACGGCTCGTTGACTTAATCGCTTACAA CACCGATGGTAAAGAAATCGCTAGAAAAACCATTTGCTATCAGCCCATTAACACGATATTATCCAAAGCCAT TAACGCTAACA	2974	IERVHDEFVFARYTKANYENTYYDTEF SHLKEASAYFPDIDEASLFTDLQDYFN SWKELSKNAKDSAQKQALAQKTEALT HNIKDTRELTTLQHKASEELKSVKEV NSLGSQIAEINKRIKEVENNKSLSKHANE LRDKRDELEFHLRELLGGNVFKSSIKT HSLTDKDSADFDESYNLNGHGFNIIDG SIFHPLVKESENKGGNLQVYFQSDDF KVTNITDKLNQGRVGALLNVYNDGSN GTLKGLQDYIDLLDSFAKGLIESTNAY AQSAHYIEGEPVEFNSDEAFKDTNYN IKNGSFDLIAYNTDGEKEARKTIAITPIT MNDIIQAINANTDNDQNNNTENDFDDY FTAGFNNETKKFVIQPKNASQGLFVSM KNGTNGFMGALKLNPFQGGDDASNISL NKEYKKEPTTIRPWLP

HP0136	2975	GCCTTTGGGCTTAAAGACACGCTAACCGGGGACACGCTTGGCATGAAAAAATGCGGTGGTTTAGAGAGAA TGGAATTTCTGAGCCAGTCAATTCACATCGCTGTGGAGCCTAAACGAAAGCAGACCAAGAAAAATGGCGTAGC GTTAGGCAAGCTCGCTGAAGAAGATCAAGCTTATAGGCTGATGACTCAAGAAACCGGCAACCTTATTGGT GGCATGGGTGAATTGCACTAGAAATCATCGTGGACAGGTTGAAGAGAGAAATTAAGGTGAAGCTGAAATCGGTC AGCCGAAGTCGCTTTAGAGAGACTATCCGCTCAAGCGTGAGCAAGAGCATAAATACGCTAAGCAAGCGGTGG TCGTGGCAATACGGGCTGTTTATCAAGCTTGAAGCTTAAGAGCCTGAAGAGCCTGGCAGTGGTATGAATTTGTGAATGAA TTCTGGGGGCTGATCCCTAAAGAAATATATCCCTGGGTGATAAGGATCCCAAGAGCGGATGCAAAATGGCGTT TTGCAAGCTATCCGCTGCTGATTTAAAGTTACCTTTATGATGGAGCTACCATGATGTGGATCTTCAGAAAT GGCGTTAAATCGCTGCTATGGCTTAAAGAGCGAGTCGCGGCTAACCGGTTTACTAGAGCCTATGA TGAAAGTGGAAGTCCCTGAAGAAATACATGGCGATGTGATGGCGATTTGAATAGAGAGAGGCGCAAT CAATCTATGACGATAGATTAGGCTTGAATATCGTGAACGCTTTGTGCCGTTGGTGAATGTTGGCTATTCTAC GGATTTACGATCAGCCACCAAGGGCGTGGGACTTAC	2976	AFVGLKDTLTGDTLCDEKNAWLERME FPEPVIHAEPTKADQEKMGVALGK LAEDPSFRVMTQEETGQTLIGMGE LHLEIVDRLEKREFKVEAEGQPQVAFR ETIRSSVSKEHKYAKQSGGRGQYGHV FIKLEPKPGSGYEFVNEISGGVIPKEYI PAVDKGIQEAMQNGVLAGY/PVWDFKV TLYDGSYHDVDSSEMAFKIAGSMAFKE ASRAANPVLLPEPMKVEVEVPEEYMG DVIGDLNRRRGQINSMDRLGLKIVNA FVPLVEMFGYSTDLRSATCIGRGTY
HP0136	2977	GATTGCCAGGACGCTGACTATGTAAAAACATGATCACCGGTGGCGCAATGGACGGAGCGGATTTGGTGTG TTCTGCAGCTGATGGCCCTATGCCTCAACTAGGAGCATATCTTATGCTCGTCAAGTAGGCGTGCCTCACATC GTTGTTTCTTAAACAACAAGACATGTAGATGACCAAGAAATTTAGAACTTGTAGAAATGGAAGTGGCGAATTG TTGAGCGGCTATGAATTTCTTGGCGATGACATCCTATCGTAGCGGTTACGCTTAAAGAGCTTTAGAAAGCAAA GGCTGGTATGTGGTGAATGGGTGAAAGAGTCTTAACTTATGGCTGAAGTGGATGCCATATCCCTACTCCAG AAAGAGACACTGAAAAACCTTTCTGATGCCGTTGAAGATGTCTCTATTGCGGTAGAGGAGTGTGGTTACA GGTAGGATTGAAAGAGGCGTGTGAAAGTAGGCGATGAAGTGAAATCGTTGGTATCAGACCTACACAAAAACGA CTGTAAACCGGTGTAGAAATGTTTAGAAAGAGTTGAAAGAGTGAAGCGCGGATTAATGTGGCGGTGCTTTTGAG AGGAATAAAAGAGAAAGTGAACGCGGTATGTTG	2978	DCPGHADYVKNMITGAAQVMDGAILVV SAADGPMPTQREHILLSRQVGVPHIV FLNKQDMVDDQELLELEVEMEVRELLSA YEFPGDDTPIVAGSALRALEEAAGNV GEWGEKVLKMAEVDAYIPTPERDTEK TFLMPVEDVFSIAGRGTVVTGRIERG VKVGDEVEIVGIRPTQKTTVTGVEMFR KELEKGEAGDNVGVLLRGTKEEVER GMV
HP0136	2979	CGCTTTGAATCGCCAAACACCATAGTGCAGCTCATTTATGACAGCGCTTTAAGAGAAAGTTTAGGCTCGCATGT GAGTCAAGCGGGAGTTTAGTGAATCCAAAGCATTGCGCTTTGATTTCTCGCATGCTAAAGCGCTCAATGATGAAG AGCTAGAAAGTAGAAGATTAGTCAACGCTCAAAATTTCAAGCACCTAAATAGCCAGGTGGAGCATATGCCCTTAA ACCAAGCCAAAGATAAGGAGGCTTAGCGTTATTCAGTGAATAACGCTGAAATGTGGGGTGGTGGTAAAG GAAGCGTCCATTGAATGTGTGGGGCATTGATGGAATACTGGCTTATGGGGGTTTAGGATTTGTAAGAA AAGCGGGTGAGTAGTGGGTGAGACCTTATGAAATAACGATGTGATCGCGGTATCAATAAGCTTAAAGAGAG AAATAAGAGCTTAAACCGCTAAGACTTTATGAAATAACGATGTGAAATAACGCTGAAATTTGGTGGTGG CGTGAAAAACAGCCAAAGCCCGCTTATGAAATAACGATGTGAAATAACGCTGAAATTTGGTGGTGGTGG GCGTAGTGAAACAGCGGACATTAAAGAAATGATTGACCGATTGAAAGTAAAGCATGAAAGATTGCTCGCTATGGTG TTTAAAAAGAAATGAGCGAATCACTCTCGCATGCGGGTGAAAGACGCGCCCATAAAGCGGAATGTGTGGGCTAA TGAAAGTGGCGCAATTTAGGGGCAAGGGCGGAGAGGTGATTT	2980	RFEIAKHSATHLLQSALREVLGSHVS QAGSLVESKRLRFDSSHAKALNDEELE KVEDLVNAQIFKHLNSQVEHMLPLNQAK DKGALALFSEKYAENVRVVSFKEASIEL CGIHVENTGLIGGFRIKESGVSSGV RRIEAVCGKAFYQLAKEENKELKNAKT LLKNNDVIAGINKLKESVNSQKAPVS MDLPVEKIHGVNLVVGVEQGDIKEMI DRLKSKHERLLAMVFKKENERTLACG VKNAPIKANVWANEVAQILGGKGGGR GDF
HP0136	2981	TGAAAGTGGCGCAATTTAGGGGCAAGGGCGGAGAGGTGATTT CAAAACGAAATAAGGCGTTTAGCCCTTTTAGCGCGCTTGAAGAAAAATTCACCCGATTAGAGAGCTAGAAAA AGAAAGGCGATTGTAGAGGATAAAAGCGTTTCCAAAGGATTTAGAGAAACGATTGAATTTGAAAAATGAAAT AGAGAGGCTGATTAAAGAGATGAATACGAACGCTTTTAGCAAAATAATTCCTTTCTAGTAGAGGAAACT GAACGATAAATCGCTCTGGCTTAGAGGTCTAGAAATACCCATAAATCAGCATGCTTTAGAGAGCGTGGGCC ATAGCGCGGAGTTTAAAAAGCGCTTATTAGAGCGGCGCTCTATTGAAAAAGAGCAGGCTAAATTAGAAGAG TGCGAGCGTTTGACATTGAAAAAGTTCTAGAAAGGCTTGGCATGCTAAAGTGGATCATTAAAGATTACGGGAGTAT TATGATGCTAAAGAACGATTAGGGCATGTTAAACGAATTCACAACTTAAAGAAATGATAGTCAATGCGAAAC TTACCAAAAGAAATAGAGCGATTAAAAACCGAATGCTTGAATTTGCGGAAGAAATAGCGGCTTAAAGAAAGATA TTTAGCGGTTTAAAGCTCTTTAAGCGCTAAAGCGAAAGATTGCTCCTTAAAGACCCAGTTTGGTTTAGAAGA CGCCCCCATGAGCGAAAGGCGCTCAAAACCTGTTTGAATTTGCAAAATTCCTCAATTAAGAACCTTAAGCTCTG GAGATACAGCGCTTTGAGACTGGCGTTTCATGCTTTAGAAATGGAATTTTAAAGGATTT	2982	QENKAFSPLLGALEEKFTRIELEKE RRLEDDKRFQKDLERLNFEMKLER LDLKEDEYERLLEQKLLSSKEKLNDKI ALALEVLENTHTKITHALESVGHSAEFLK SALLEASALLEKEQAKLEECERLDIEKV LERLGMLSGIKDYGSIMHAKERLGHVK NELHNLKEIDSHCETYHKEIERLKTECL KLCEEISGRFKEYLAGFNALLSAKAKDL LLKSPSLVLEADPMSEKGAQKLVNLQ NSQLETLSSGEYSRLRLAFMLLEMEFL KD

HP0136	2983	TATTCAAACCATGAAGCGTCTTCGACCATATAAAAGAGCATCGCCCTAACAAAAACCAACCAACCAACAAACAA AAACATGCCAAACACGAAATTACGCCCAAGAAAGATTGGATAGCAACAAAGTAGAGCGGTTACGGAATTTTGCA TGTGAATGAGAGAGGACTTTAGGCTTTCATAGGAGTTAAAAAGGCGTTGAAGCGAATAACAAGATCCAAAGTGG AGCATTTAAACCCGCGATTATAGATGAACCTAACTTAAGCGAGCGTTAAATCACGCCCTTAGGGGCTTGGGT GAGATTGGGGGAACATGATGGTCAATTGAACCCCAAAAGCGGATCGTGATTGCGGGCATGAGCTTCCCTA AAGAGGGGCTCTTTGGCGTGATATTTAATCCCGGATTTTCTACTTGACCAAAATCAAGGACAAATCGCTGGC ATTATCATACCCATGCCATGAAGATCACATAGGGCCACGCTTATTTGTTAAAGAGCTGCAATTCGCCCTTTAT GGCAGGCCCTTGAGTTTGGGCTGATTGGGAGCAAGTTGATGAACATGGTTGAAAAAATACCGCTCGTATTTAA AATCGTAGAAAAAGCGCTGTCCATTAGCGTGGCGGAATTTA	2984	YSNHEASSHHKKEHRPNKKNPNHHKQ KHAKTRNYAQEELDSNKVEGVTEILHV NERGTLGFHKELKKGVEANNKIQVEHL NPHYKMNLSKASVKITPLGGLGEIGG NMMVIETPKSAIVIDAGMSFPKEGLFG VDILIPDFSYLHQIKDKIAGIITHAHEDHI GATPYLFKELQFPLYGTPLSLGLIGSKF DEHGLKKYRSYFKIVEKRCPIISVGEF
HP0136	2985	CTTAAACCCCAAAATAAGCGTGAATTGGATCTTTCTACACGCAATTACCCAATAGGTTTATTAGACTACATG GAAATTCAGAGCTTATTCAAAGATGATGCAAGAAACCAATACCTTCTCATTGAAGAGCCCTGAAAGATTGAGC CATGCTTTAAACCGCGCTACAAGGAGATCACTGAACCTTTATTAATAATCAGCAAGTTAGAGATTCTCCCAATTCTC AAGTGGGAGCGGCTGAAATCCGCTATGAAGCAATCTTAGCCTCTTTCTCTTATTTGTTTTAAAGCAAAC CCATAAACCCCTTATTAGAGCGGTATATTTCCCGAGTTACGCGCAATTTTAACTTAGCACCTCAGTTTGTCTATTA AAAAAGCGCGCTTATAGACCTTTCAATGGGGAATACCATATCATCAACGCCATGATTAGAAGAACGCCAAA GCAACCGCAAGCGATATTTCCGCCAAACGCTGAATCAATGTGTCTTCTCAACCTTTTAAAGGAATGAGCA ACGCTTCTTACGAAACAGTGTGATTGACGCGCTCAGTAAATGCTAAACCTTTTAAATCAACATTTTCTTGGTAT TTTCTTAATCCTAAACAAATTTAAGGTATTATTAATAGAATAATGAATAAATAGCTTAGGTTTAAACTGACTAAAT TTTTAGAAAAAGTAAATAAAGGCTAAAGAAATGCTTAGAAATCAATTCGTATCGTGTGCTCTGTTGATTGTC GCTAGCAATTTGCAAGCTCAAGAAACACCCACACTTTGGTAAAGTAACCACTAAGGGTGAAGGACTTTTGAATA CAACAATAAATGTATATTGACAGAAAGAGCTCCAAACAGCCCAAGTAACCAATCCGTGATATTTTAGGACTAG AGCGGATGTGAATGTGCCAGTGGGGCTTGATGGCGCAAGATCTATGTTAGGGGATTGAGAGCCGTCTCTTA AGGGT	2986	LKPKISVNLDFYTLQPNKVYLDYMEI QELIQMMQENQYLLIEDALKDLSHAL KTRYKEITELYLKISKLEISPNSQVGSV KIRYESNL
HP0136	2987	ATTTGATTGATGAGTTCAAGACAGCGCTTGAACGATTATAAGATTAGCCCTTTTATTGATGAGATTAAAGCCG GGATAGGCAAGCGAAATGGCAGGAGCGGTGTTTTGTGGCGGATGTCAAGCAGACGCAATTTATGCCCTTAGGGG GAGTTTAGCTCTTTGTTGAAAGCGTTTCTAAGGATTTTACCACGATAATTTGGAATTTAACCCAGCGAGTGGCC TTTAATCATTAAATATGTGAACACCATTTTAAAGAGCTTATCAAAATCCCCACCGCTTATTGGAGCAAAATACC CTAAACCTTCTCAAAATAACATGTTACAGACGGCTATGTTAAAGTCTCTTAGTGGCTGATGAAGAGAAATTGTTATT AGATCAGGCTTACAAAGAGCTCAAAACCTTTTAGAACATCGTATTGAGCCCTAAAGATATTACCATTTTATGCGCCAC TAATGACGAGCTTTAGAAATCAAAATATTGCAAGAGCGTTTGAAGTGGATTCGCCCAAGCAGCAATCTAGCG CAAAATTGCTCAATTTGATAGTCTAAATCATTAAAGACGCTTTAGATAACGCTAGCGGGAACCTTACAAGC CTTTTATAAGCACAGCGTTTAAACTCGCTGGATCTTGCATGATGATGCGCTTAGCTTGGTGGTTTAAACCTA AAAAGAGAGCGTGGCAGGCTTTGTGTGAAGGTGATGGAGCAATTTGAGCTTTATGGAGAGCTGCACAAAGCTG TTTGGAATTAGCGGTTGGTGGCAAGATGCCGATGATTTTGAAGAAATTAGAGACTAAAGCGATCGCTTCTTCCC ATTCAAAGGCGCGCAGATCATG	2988	ILIDEFQDTSINDYKILAPFIDEIKAGIGQ AKWHRSVFFVGDVKQSIYAFRGSSSL FESVSKDFYHDNLEFNHRSAPLIINYVN TIFKAYQNSPTAYLEQKYPKTSQNKH VTDGYVKVSLVADERELLDDQVLQEAQ NLLEHRIEKPDKITILCATNDDALEIKNYL QERLSAIRPSTESSAKLSQFVESKIKN ALEYALAEOPYKPFYKHSVLKLAGYLH DDAIALAGFNPKKESVAGFWKVMQEQ FELYGEPAQSCLELAVGCEADAGFLEK LETKAIASSHSHKGAQIM

HP0379	2989	CAGCGGCAAACTATTGGAAAGAGCAATCATTGAAGCTAAGGGTCTGATGTTGTACCCCTACTTATTGTAACCCCTA ACGCTCCTTATAGCACCACAACTCAACCGTCTGCTTTCAGGTATGTTGAATTTGGGGTGAGAGCCCAATATTTACA AGCATAATGGCGTAGAGTTTGGCGTGAGAGTCCGCTACTCATCAACAAGTTTTTGAAGTGGGGTCTAACGCTACT AATCTTTATTACCATTTGAACGGGATTATTCGCTTTATTAGGGTATAACTACACTTTTAAACCCCTTAAAGGGGTGT CTTTAAGCCCTTTTAGTCTTATAAAAGGGTTTAGTTTGGATTTCGCATCTTAAAGCTAAATGATTATAAAG AACTTTTGGCGTAACCAACCAACCAACCACTTGGTGGGGTTTGGAAATTCATCTAAGGGTTTAAAGGGGA TTGTTTGAAGAAATAGAGAGTTTGCACCAAGCGTTTGTGCAAGAAATTTGCAAGCTTCTATCCAAAACACACCTGAAAC AGGGTTTTGATTGATTGCACTTTAGGGTTAGGGGGCATTCTAAAGCCCTTCTATCCAAAACACACCTGAAAC TCATTGGCATTGATAAGATAAGTTGCTCAAGAAATCGCTAAAGACGACTGAAAGCCTTTGAAGGGCTTATAATC TCTTAAGTGGAGGTTTGCCAAAGCCTTAAAGAAAGCCCTAGAAAGCGCTAAAGAGGATTAAAGGGGTTTTAGTG GATTTAGGGGTGAGCTCTTTGCAAGCTTGATGATGATAACAGAGGGTTTAAATTCACCTCGCACACTTTGGATATCGG CATGGATTTAGAAAGCGAATTGAACGCTCAAAAAGTTATCAACTCTTATCCCATAGTAGCGTTAGAAAAATTTTAGA GACTATGGCGAATCAAGGAATACAAAAATCGCCCATAAATTCAGAAAGCGCGCTAAAAACCCCTTTAAAAA CGCTAAGGATT	2990	AANYWKEQIIIEAKGPDVCTPTTYCNPNA PYSTKTSTVAFQVWLNFGVRANIYKH GVEFGVRVPLLINKELSAGFNATNLYY HLKRDYSLYLGYNYTF
HP0137	2991	GCTCCAAGCATCACTAAAGATGGCGTGAGCGTGCTAAAGAGATTGAATTAAGTTGCCGGTAGCTAACATGGCGG CTCAACTCGTTAAAGAGTAGCGAGCAAAACCGCTGATGCTGCCGGCGATGGCAGCACACGACCGCTGCTGG CTTATAGCATTTTAAAGAAAGTTTGAAGAACATCACGGCTGGGGTAAACCTATTGAAGTGAACGAGGCGATGGAT AAAGCCGCTGAAGCCATTATTAATGAGCTTAAAGAAAGCGCAAAAGTGGCGGTAAGAAAGAAATCACCCAAAT GGCGACCATTTCTGCAAACTCCGATCACAATATCGGGAACCTCATCGCTGACGCTATGGAAAGTGGGTAAAGACG GCGTGATCACCGTTGAAGAAAGCTAAGGCGATTGAAGATGAAGTGAAGTGAAGGCGATGCAATTTGATAGAGGC TACCTCTCCCTTATTTGTAAACACGCTGAGAAATGACCGCTCAATTTGGATAACGCTTACATCTTTTAAACGGAT AAAAAATCTCTAGCATGAAAGACATTTCTCCGCTACTAGAAAGAACCATGAAGAGGGCAACCGCTTTTAAATCATC GCTGAAGACATTGAGGCGAAGCTTTAAGGACTCTAGTGTGAATTAAGAGGCGTGTGAATATCGCAGCGGT TAAAGCTCCAGGCTTTGGGACAGAGAAAG	2992	APSIKDGVSVAKEIELSCP/ANMGAQ LVKEVASKTADAAGDGTATTATVLAISIF KEGLRNITAGANPIEVKRGMDKAAEAI NELKASKKVGGKEITQVATISAND HNIGKLIADAMEKVKGKDVITVEEAKGI EDELVDVEGMQFDRGYLSPYFVTNAE KMTAQLDNAYILLTDKISSMKDILPILLE KTMKEGKPLIIAEDIEGEALITLVNKL RGVLNIAAVKAPGFGDRRK
HP0137	2993	GGGTGACGATGCGGCTTGAGCTTGTCAGGCCAGAGGCTTTTCAACAACATGGGGGCGATCAAAAACACCCAC ACCAAGATGAGTATCCCTAAAGCCCTGATGATTTCAACCTTTTATCAAAAAATCCATAGAGATTTAAACCAAGAA ATCTCGTGCCCGTAGAGCATAAATCTATAATGGCGAGAGCCCTTAGAAATGCCTAACACCTTAAGGCCAATGAA ATGCGTTTGCATCTGGGCAAGAAAGCGGATTATGAGCAAAAGGACTTGATGGTTGGTTTGAATAGCGAATCGCA TTTGTGGTGGTGAGTCAAGATTAAAGCGCTCGCATCGCCCTGATGAAGCTTTTGGCTCAAAATTTCAAGACTGCCAA CAAAGAGTTGCTCTTCTACAAAGCCGCAAAAGCCCTTGCAAGAGAACTTGATGAGTTGAAGAAACACACATCACGC CCATGCAAGGCCCTCTAGGAGCGTTTGGACACCGCTATGAATCCTAATAGCGTCTTGTGATAGACAATCTCAAC GAAGCCAAAGAGTTGCACGACAAATAGGGGTGAAATTAAGATCGTTTGAAGAAAGCCACAGACAACGAGCA GTATTGCATCATCTTTGGCAGCAGCTCAACAGATTCAAGCTAATACGATCTTAGCAAGTTAAAGAAATTTGTTAAAC AACCACCTCAACAACCGCTTGGCTTTAGGTGTAATGGTGAGAACTTAGCGCTATCAAAAAGATTTACCTCTATTA ACAAACGAACTCAACGCGCTATTGTAGAGCTTTCTAAAGACAGCCCATCTGAATTCAGGCCCTTTCAGCTTATAGGGT CAAAAAAGGGGGAGTAAAAAGACTAAAGGACTTTTAAATCTTTTGAAGTGCCTTCAAAACCTTTTGCCTGGTGGTTTG CGTAACCAAGCGAGCGATTCTTCT	2994	GDDAACELVRPEGIFNNGGHQKHHT KMSIPKAPDDFKPFIKKHHRDFNQRNLV PVEHKIYNGEKPLEMPNTLKANEMRLH LGKEADYEQKDLMVGFENSESHLLV SQDLSARIAIMKLFAGNFKTANKELLY NAEKRLARELDELKHHHTPMQGPLGS VLDTAMNPNSVLVIDNLNEAKELHDKIG VEKLSFLEKATDNEQYCIIFAHDLKQI QANYDLSKLELLNNHFKQFLAFRCN GENLSAIKKDLPLLTNELNALFVELSKD SHTEFRPFSL

HP0137	2995	GCTGAAAGTTATTTGGCGAGAGCGTTACGGAAGCGGTGATCACGGTTCAGCTTATTTAACGACAGCCAAAGGA AAGCGACTAAAGAACCGCGCAGGATTGACGGCTTAA'GTTTAAAGGATCATCAATGAGCCTACAAGTGGCGCATTA GCTTATGGCTTGGATAAAAGAGAGCGAAATAATCATGTTTATGATTTGGTGGGGGACTTTTATGATGTTACCGT TTTAGAACAGCGGATATGTCGTGAAGTTTACCCACAGGGGCGATGCGT'TTTTAGGGGCGGATGATTTTGACA ATCGTGTGATTGATTTCTTAGCGAGTGAGTTTAAAGCGAAACGGGCAATGAAATTAACGATGATGCGGTTG CAACGCCCTAAAGAGCGGCTGAAACCGCTAAAGAAAGAACTGAGCTCTGCGATGGAGACTGAAATCAATTTGCCCTT TATCACCGCGGACGCTACCGGGCTAAACACTTGTAAAGAACTAGGCTAAATTTGAAAGCTTGACAGAAG ATCTCATGAAAGAAACGATTTCTAAATGAAAGCGTGATCAAGATCGGGCTAAACCAAAATGAGATTTGAGAAG TGGTGATGGTGGAGGCTCTACTCGTATCCCTAAAGTCCAAAGGGAAGGCTGAAAGCGT'TTTATTAAGATTTGAAT AAAGCGTCAATCCTGATGAGTGTGAGCGGTGAGCGGAGCAATCAAGGGGCGGTGTTGAAAGCGGATGTGAA GATGTGCTTTTATAGACGTTACGCTTAAAGCCTTGGGATGAACTT'AGGGGCGGTGATGACTAAAGTATTGAT AGAGGCACGACTATTCGGCGGAAATACTCAAGTGTCTCAACCGCTGAAGACACCGCGCTGTGTCCTCATTAT GGTTTACAAGGCGGAGAGAAATTGGCAAGGATAATAATCTTTGGTAAATTTGATTTGCAAGGCATCGCTCCAG CTCCAAGAGCGGTGCCGCAATG	2996	AESYLGESVTEAVITVPAYFNDSQRKA TKEAGTIAGLNVLRINEPTSAALAYGLD KKESEKIMVYDLGGGTFDVTVLETGDN VVEVLATGGDAFLGGDDFDFNRVIDFLA SEFKSETGIEKNDVMALQRLKEAAEN AKKELSSAMETEINLPFITADATGPKHL VKKLTRAKFESLTEDLMKETISKIESVIK DAGLT'KNEISEVVMVGGSTRIPKVQER VKAFINKDLNKSVPDEVAVGASIQG GVLKGDVKDVL'LLDVTPLSLGIETLGGV MTKVIDRGTTPAKKSQVSTAEDNQ AVSIMVLQGERELARDNKSLSGKFDLQG IAPAPRGVQIEVTFDIDANGILTVSAQ DKNTGKSQIEKISGSSGLSDSEIEKM
HP0137	2997	TGATCAATCAGCGATGCGGTTTAGATTACATTATGAGCGGGATCAAAAAGCCAAAGTCGCATGCGAGACTTTAG TTTCTAACGGGTTTGCATGATCACTGGCGAGTTAAACCTCTGTTATGCCCTATGCAAGAGATTGCAAGAGAAG TGTTAAAGATTTGTTATACGGACGCTCTTATGGCTTGTATACAGGAGCGCGGCTTTGATGGCGTTGGC GAGCAAGCCCTGATATTAATCAAGCGCTGATAGAGATGCGGAGATTGGGCGAGGATCAAGGGCTTATGT TTGGTTATGCATGCAAGAGACTGAAACGCTCATGCCCTTACCCATTATAGCGCACCGCTCACCTTTCGCTCTG GCTCAAAAAGAAAGACACACTCTGCCCTTTTAAAGCCTGATGGCAAGTCTCAAGTGAGCGGTGCGTTATGAAA CAACAAGCCTGTAAGCATTGATACGATTGTCAATTTCCACCCCAAGATTCCCAAGAAATTTGCAAAAACATTTAAAGA AGCTGTGATTGAAGAGATCGTGTATAGGTTTATCCAAAGAATATTTGCATGACAATATCAAGT'TTTTGTCAATCCT ACAG	2998	DQISDAVLDYIERDQAKAVACETLVSN GFCMITGELKTSVYAPMQEIAREVWKI GYTDALYGFDRYSAAVLNGVGEQSPDI NQGVDRDGEIGAGDQGLMFGYACK ETETLMP'PIHLAHLQTLFALAQRKONT LPFLRPDGKSQSVRYENNKPVSIDTIV ISTQHSPEVSQKHLKEAVIEEIVYKVL KEYLHONIKFFVNPT
HP0137	2999	GGGTTT'TTGACTTTGATTTGATGGGATTGTGTGCAAAATTTCTTGATAACGCTATTGATGCGGATTGAAGCCTTAG AAGAGAGCGAACAGGGTCAAG	3000	GFDFDLMGIVLQNFLYNAIDAIALEE SEQGQ
HP0137	3001	TGAAGCCGGCTTCACTTCCCAAGCCCATTCAGAAAGGCCATTCGGCTGTTTGAAGGCCGAGATGTCATC GCACAAGCCCAACAGGCACAGGAAACCGCGCTTTCGCTCTGCCATTATCAACAACCTTAAACCAACACACAC CATAGAAGCCCTAGTGATCACGCCCAACAGAGAAATTAGCCATGCAATTAGCGATGAGATTTTCAAAATTTGGCAAC ACACCAGGACTAAACCGTGTGCTGATGGAGCCAGAGCGTTAAAGCAATGCGAATTCATTAAGAAAAATCCC CAAGTGATCGCTACACAGGAAGGCTGCTGATCATTAAAGCAAGCAAGCATCCATAAATTTGTGCCCTAAAGT GGTCGTTTATAGTGAAGCGATGAAATGCTGATATGGGTTTITAGACGATATTGAAGAGATTTTGAATACCTCCC TAGCGAAGCGCAGATTTGCTTTTTCAGCCACGATGCCAGCGGATTAAGAGACTAGCGGATAGATTTTAGAAA ACCTATTAAATCCATATCGCTCTTCTAATATCACTAACCCGACATCAACCAAGCTTTTATGTGATCAATGAGCA TGAGAGGCCGAGGATCATGCGCTTTTAGACACCCCAAGCACCCCAAGAGCATTGTTTACCGCGCACTAAA AAGAAGCCGATGAATTGCACCAATTCCTTGTCTTAAATAATACAAAGCACCGCTTGCATGGGATGATGATCAAA GGATCGGGCTCTTCTATCATGGCGTTTAAATAATGACGCTGATGTTGGTGGCTACAGATGTGGCGAGTCGT GGGCTAGATATTAGCGGTGAAGCCATGTGTTTAAATACCTTGCCTAAACACTGAGAGCTATATCCATCGCATC GGGAGAACCGGGGAGCGGCAAAAGGCGATGGCGATCACTTTAGTAACCCCTTTAGATAACAAAGAGCTTTTAC GCATGCAAAAGAAATTGAT	3002	EAGFTSP'PIQEKAPAVLQGRDVIAQA QTGTGKTAFAALPIINNLKNNHTIEALVI TPTR'ELAMQISDEIFKLGKHTRTKTVCV YGGQSVKKQCEFIKKNPQVMIATPGRL LDHLKNERIHKFV'PKVVVLDSEDEMLD MGFLDDIEEIFDYLPSEAQILLFSATMP EPIKRLADKILENPIKIH'PIASNITNDITQ RFYVINEHERAEAMRLD'LTQAPKKSIV FTRTKKEADELHQFLASKNYKSTALHG DMDQDRRRSSIMAFKKNADADVLVATD VASRGLDISGVSHVFN'YHPLNNTESYIH RIGRTGRAGKKGMATLVT'PLEYKELLR MQKEIDSEIELFEIPTINENQI'IKTLHDAK VSEGISLYEQLTEIFEPSQLV'LKLSLQ FETSKIGLNQ'QEIDAIONPKETPKPSN KKT'PQHERARSEFKKGQHRDRHPKTNH YSKKPKRR

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HP0137	3009	TAAACCGGAATTGAAAGGCTTTACAAACTCAAAACGCGCTTCAATCTAGCAAGGGGAAATTTATCGCCAAAGCTATAA AGAAATATTGAAAGAGATTTTGATGAGAGCGGTAATTTACGGCTCCATCAAGGCTATTTAGCGCGGATAGCGTAG CGCTCAATAAAGGCAAAAGAAAGCAAAAGAAAGACATTGAAGCCCAACGACATTAATGATTTAAGCGGAAAG AAAACTGCTTTCAATTTCAAACGCTTTGCGTTTATTTAGCGTGTGGCTTTGCAAGAGGCTGGGATAATCCAA ACATTTTACCTTATTAACTGGCAATTTCTACAGCGAAACCGCCATCAGCAAGTGGGCGCGGTTAAGA ATTGCGATTAAATCAAGAGGCAAGCGCTTACGCATGGATTTTAAAGGCAATGACAACGCTTTTATAAAATAAAC TACCTTGATATGTTAGTGAGTGGCGAAGAGTGGCTTTATAGAGGTTTGCAAAAGAGATTGAAGCGAGCAGCTT TATTGGTGGTGGCAACGCGCTAGACAGAGAGGATTTAGCCAAAGTTAGGCTTAATGAAAGAGAGATAATAAATTT TCGTTGAATTAGAAATTTCAACGCGCTAGAAATTTGACGAAACCAACGCTTACAAATCATTTGCCCTATTGTG AGACGATGCAAAACAATGAAGAAAGG	3010	KTEFERLYKLKRASILARENLSPSYKEY LKRFDFDESGNLRVHQGYFSGDSVALN KGGKESKKEDIEANDIKMILSEKELLS FQTPLRFIQSVWALQEGWDNPNIFTLIK LANSTSETSRHQVQVGRGLRIINQEGK RVTHGFLKGNDAFYKINYLDMLVSGE EVGFIEGLQKEIEASSFIGGNALEDRED LAKLGLNEREINKLFVELENSNALEFDE TNAYKIIAPICETMQNNEER
HP0137	3011	GGCAAAAGACATTTTATCACAGGGGCTGTGGATCGGCAATGAGTGAAACCGGTGGGGGGCGGATCTGGTT TTTGAAAGCTCAACCGAATTAAGCGCTAATGGGCTTATTTCAAATAACAGAGCGCGGACCGCAACTCTTGGATC AATTTGATTTCCAATAACAGCGTGAATTTGACAAACACAGATTTTGGCAACCAACCCCTAATGGGGCTTTAATGCT ATGGGGCGAAAGATCACCTATAATGGCGGGAATTTGCAATGGCGGGAATTTGGCTTTTGATAACGTGGATAGCAATG GGCAACCAACCATTAGCGGAGTAACCTTCAACAATAACGGCGGCTCACTTATAAGGGTGGGAATGGTATTGGGGG GAGCATCACTTCACTAACTCTAATATCAATCAATCACTCAATCACTTAAACGCTAATAGCTTAAATCAATCAATCAAT GCTTTAGGGAGTATGCCCTAATGGCAACGCTAATCACTAGGAACGCTATATCTTAAATGCAAGCAATATCTTTTA ATAATTTGACCTTTAATGGGGATGGTTTGTCAATATGACCGGTAAAGTTACTATTAATCCTAATGCGATTTTAAACATTCAAAT CAACAACCCACTTCGCCCTTTGTCAATATGACCGGTAAAGTTACTATTAATCCTAATGCGATTTTAAACATTCAAAT TACACGCTTAGTATAGGGAGCGCTTACACGCTTTAGCATGAAATGGCTCTATCACCTATAATGATGTCATAAC TTATGGAATATCATCAGGCTTAAACACGCAAGCCCAAGACGCTGATAAAATCATAAAGTTCAAATAACAAC ACCCACACTTACTATGTAACCTACAATTTAGGGCGGCGCTTATAATTTAGACAAATTTTAGCCCTGATCTATTG TTTTGCAATCTGCTATTATGGCGCGGAACAATCTTTACTACACCAATAGCGTGAATATCCATGATAATGTTTTTAATTAA AAAAATATT	3012	AKDIFITGAVGSGNEWKTGGGAILVFE SSNELSANGAYFQNNRAGTQTSWINLI SNNSVNLNTDFGNQTPNGGFNAMG RKITYNGGIVNGGNFNGFDNVDNGATT ISGVTFNNNGALTYKGGNGIGGSITFTN SNINHYKLNANSVTFNNSALGSMPN GNANTIGNAYILNASNITFNNTFNNGG WVFNIPDAHVNFQGTITINNPTSPFV NMTGKVTINPNAIFNIQNYTPSIGSAYT LFSMKNGSITYNDVNINLWNIIRLKNQTA TKOADKNHTSSNNNTHYYVVTYNLGG TLYNFRQIFSPDSIVLQSVYYGANNLYY TNSVNIHDNVFNLNKINDDKADTIFYLN GLNTWNYTNARFTQTYGGKNSALVFN ATTPWANGSIPKSNSTVRFGGYEGVN WGKTGYITGTFTADRVYITGNMMTGN GAQTGGGATLNF

HP0137	3013	TCATTCCTCAAGCGCGACAGCCCCAACCAATGAACACTAGAACGGAATGCGAATAATTCGCTTTTTCAGGTGCAAT TAAGGCTAATGGATTAGTGGAATTTTCAAAAAGTTTACAAAATACTACGATCGGACCTTTAGATTTAGGCCAAACGC TACTTTTAAAGCGGAATCATTTGATCGTGAATAACGCTTTTAAACAATAACTCTAATTACAGGGCTGATATTAGCGGTAAT CTCAATGTGTTAAAGGAGCGGCTCTCAGCACGAATGAAATGGTTTGAATGTGGGCTGGCAATTTCAAGAGCGAAG GGTCATTAACTTTAATCTTAAACAATAAACCAATCAACGATTATTAAATGTGGCTGGCAATTTCTACGATCATGTCTTA TAACAATCAAGCTTTAATCCATTTTAAATACCCAACTCAAGCAAGCGCTTACACGCTTATTAAATGCGAAACGCATGCT TTATGGTTATGACAATCAAATCATTCGTGGAGGGAGCTTGAGCGATTACCTCAAGCTTTACACCTCATTTGATTTTAA CGGCAACCGCATGCAATTAACCGGCGATTCACTAAGCTATGACAACCAACCGGTCATAATTAAAGATGGGGCTTG TGGTAAGCTTTAAAGACAATCAGGGGCAATGGTGATTATCATCTATCTTTATGATAAAGTTCAAGTTAGCGTCTCTG ATAAGCCCATGGATATTATGCCCCCTAGTTTGGAGTATTACATTAATACATTCAAGGCAGTCTGGTTGGATGCGA TCAAATCTGCAGGCAATAATCCATCTCTGTGGTTGAATGAGCTTTTGTGGCTAAAGGGGTAATCCCTTGTTCGCTC CTTATTATTGCAAGACAATCCCACTGAACACATTTGTTACTTTAATGAAAGATAATTACTAGCGCTTTAGGCAATGCTTTC TAAACCCCAATCTTAAACAATTCACCGATGCTTTACAGCTCAACACTTACACGCAACAATGAGCGGTTTAGCCAA GCTTCTAAT	3014	HSSSATPTNETLEANAINFAFLGAIK ANGLVDFSQVLQNTTIGTLDLGNATF KANHLVNNAFNNNSNYRADISGNLV VKGAALSTNENGLNVGGDFKSEGLIF NLNKTNTQTIINVAGNSTIMSNNQALI HFNTQLKQGAAYTLINAKRMLYGYDNQII RGGSLDYLLKLYTLIDFN3KRMQLNGD SLSYDNQPVNIKDGGLVVSFKDNQGGQ MVYSSILYDKVQVSVDK:PMDIHAPSL EYIKYIQGSAGLDAIKSAGNNSILWLN ELFVAKGGNPLFAPYYLCIDNPTEHIVT LMKDITSALGMLSKPNLKNNSTDALQL NTYTQQMSRLAKLSNFA3SFDSTDFSE RLSSLKNQRFADAIPNAMIDVILKYQR DKLKNLWATGVGGVSFVENGTGLY GVNVGYDRFIKGVIVGGYAAAYGYSGFY ERITNSKSDNVDVGLYARAFIKKSELT SVNETWGANKNQISSNDTLLSMINQSY KYSTWTTNAKVNYGYDFMFKNKSILK POIGLRYYYIGMTGLEGVMMHNALYNQF KANADPSKKSVLTELAL:NRHYFNTN SYFYAIGGFGRDLLVNSMIGDKLVRFIG NNTLSYRKGEELYN	SSALERELKQKNEHLENALKEQEYLN AWLLEMEKQKEIFHNKKLEKESYQQA LNILKSEVASKDTSMMHKIEHKASEILS KHKTNQEIPIITNFQANEKARYKNESV LIVQILDKGYWIEITELGMRKKAHGSLL KKIQKPPKNKFPPKTTIPKPEASLRL DLRGQRSEALDILLDAFLNDALLGGFE EVLICHGKGSGILEKFVKE:FLK
HP0137	3015	TCCAGCGCGCTAGAAAGGGAAATTGAAACAAAAGAATGAACATTTAGAGAACGCTTTAAAGAGCAAGAAATATTGAAA AACGCATGGCTTTAGAAATGAAAAACAAAAGAAATCTTTCACAATAAAAAATTTGGAATTTGAAAAATCCTACCAAC AAGCCCTAAATATCTTAAAGCGAAGTCGCTTCAAAAGATACTAGCTCCATGCATAAAGAAATCCATAAAGCGAGCG AAATTTTAAAGCAACACAAAACCAAGAGATCCCAAAATCATAACGAATTTCAAGCCCAACGAAAAAGCGCGCT ACAAGAATGAAAGCGTGTGATTGTACAAATTTAGACAAGGGCTATTATTGGATAGAAACCGAGCTTGGCATGCGT TTAAAGCGCATGGGAGTTTGTGAAAAAATCCAAAACCCCTTAAAAACAATTCAAACCCCTTAAACCAACCACTT CCTAAACCTAAAGAAAGCGAGCTTGGCCTTGATTTAAGGGGCAACGACGGAAGAGCCCTGGATTTACTAGACG CTTTTTTAAACGACGCGCTTTAGGGGCTTTGAAGAAAGTGTGATTTGCCACGGCAAGGGAGCGGATTTTAGAA AAGTTTGTGAAAGAAATTTTAAAAA	3016	SSALERELKQKNEHLENALKEQEYLN AWLLEMEKQKEIFHNKKLEKESYQQA LNILKSEVASKDTSMMHKIEHKASEILS KHKTNQEIPIITNFQANEKARYKNESV LIVQILDKGYWIEITELGMRKKAHGSLL KKIQKPPKNKFPPKTTIPKPEASLRL DLRGQRSEALDILLDAFLNDALLGGFE EVLICHGKGSGILEKFVKE:FLK	
HP0137	3017	GCCTTTAGGTTTTGGCATTGCCAGAGTGGATATTGCCCTATTTCCAAAAAGATTTTATGCGCCACTTACCCCTGTTTT GAATTGGAAAGATGAAATTTAGGCTCTTATGCGGTGTTTGGCAACTCGCTTTCAAAAGAAAAATCCTAAAAAGAGAG CGGAGCGAGCGGCTTATTGAGATTGATGAAAGTTTTGTGTTAAAGCGTTGGATTTTATACGCCCTTTTGAATGA AGCCTATTCTAATAAAATGGCTCATAAAACATCCAAGTGGTTTTAGAGCTTTTAAAGCTTTAGAGAAATAATCGTTTG AAAAATAGCGATGGGAGTCTCTTTATCGCTTGGTGATCTTGTATGAAGATAAGCCTTTCGAGAGCGGTGGAGAGCG CGTATATGAACCTTTTAGCGCTCTCTTTAGGTAAAGCCCTTATGAGGAGTTTGAATTTAGAGGGTATTTTAAACCAGC TTTCTAATGCGGCTGGAGCGGTAAACAGCCCTATGAATTAGATGGCTTAGAATGAACGAAGTGGCTTTTAAATAATG CGAGACCATTTCCCTAGCATTTGATTTATAGATAAAATCCACGCTATTGATGCAATTAATCCCTGAGTTTGATAATA TCCGCTTATTGGATAGCTCAAAAACCGCGCTTTGGGCGTATTTAGGGACTGGAGGTTATACCCAAATGCCTGGGCT AGTTATGTGAATTTAACGCAGGGGCTATGGGAGTGTGCATGAATGAGGGCGTATTTCTTCATCGGTGGTGGTTGG AGCAGGCACTGATATTGGTGGGGAGCGGCGTGTAGGCGTTTTAAGTGGAGGGAATAACAACCCCATTAGCATC GGGAAAATTGTTTGCTAGGGGCTAATAGCGTTACTGGAATTAGTCTAGCGGATGGCTGTATCGTGGATGACGCGG TTGCGATACTAGCCGGGAGCGTGATAGAAATTGAAGAAATGAGTTTAAAAAGCTTTTAGAAGTGAATAGCGGCTTTAG AAAAACATGCCAACAAAC	3018	PLGFGIARVDIAPISKILCATYPVLNWK DENLGSYAVFCNSLSKEKILKESASER VIEIDESFVLKALDFYTPFI.NEAYSNMK AHKNIQVVLLELLKALEENRILKNSDGES LYRLVILYEDKPCESVESAYMKLLALS GKAPLRLNLEGIFNQLSNAAWSGNKP YELEWLRMNEVALKMRDHFPSIDFIDK FPRYLMQLIPEFDNIRLLDSSKTRFGAY LGTGGYTQMPGASVYVNFNAGAMGVC MNEGRISVVVWAGTDDIGGASVVG VLSGGNNNPISIGKNCLL:GANSVTGISL GDGCIVDAGVAILAGSVIEIEENEFKLL EVNSALEKHANNLYKGKELSGKNGVH FRSNSQNGKLIARFSVKIELNQNLH	

[illegible]

HP0137	3027	GACACAAGCGATGATGAAAAAGAACAGCTAGATATTGACAGGATAGATAAGAGAAAAACCAGTAAGCGAACACTTAAA AAACACTAACAAACACGAGCTATACGAACTCTTAGGCTTTTATCAAAAAGAAATAGATAAAAACAAACACCACTTCAGCC TTTAAAGAAATTTGCTATTCTCAATGGTTTAGACAGAGACTTTGAAAGAGAGACTAATGGCTATTCTGTTTAAAGAAAA AAGAAATGCTTTTAAATAAGCTTGAACACCTAGACAAACGCTTTTAGATAAAACCTCACACTTACTATTAGCCAAAGCCTTAGAA AAGAAATGAAGTTAAACCAAGCAAAACATCCAATACAACTCTAATCTTCTTATGCTAGAAATATCAATTCATGCTAG CTTCTAAAGATAAACGCCCCACTCTCAAACTTTTAAACGCTTATTTAGTGTAGAAATATCAATTCATGCTAG AGAGCTTTAAACCTAAAGCAAAATGACCCACTTACAAGCTTAATGATAACACTTATGAGCTAGTAGTAGTAAGCAACTAC AAGACTATCAAAACACCATGCTTTTATTAGCCAAAGAGAGATTACTTTTTTGAACAAGATTAAACCAAAAGAAAA AGAGTTTGAAGAGAGCCAAAGAACATTTATGTGAATCTTCAAAACATTTAGAGAACTTCAATGCTCCTCAAAAGAAAA CAAGGCTTTCTCAACAAATTAACAAATTTCTAAATTTCTAAGGATATCTCTATACCTGTAATGAGATCATAGGAG CTAATAGGTTTAAACCCACTATGACAACTTAAACCTTGAAGAGTCTAGAACCGCTAAAGATACTAAGCTAGAGC AAAAAGAAATTCAGCTATCACAAAGAGCCTAATAACGATGAGCTTGAGTTGGTAAAGAAAGCAACAGCTA GAGCTAAAGCACACTATCAAGCTATGCTAGAAAAAGAAAAAGCTAAAGAAATAGCTAAACAAAGCTAACACCTTGC ACT	3028	DTSDDEKEQLDIDRIDKRKPVSEHLKN TNKHELVELLYGYQKEIDKKQNHSAFK NFAILNGLDRDFEREETNGYSVLKKEM LLNLEHLDRLLDKNEHLLLAQLRNE VKTQNIQYNTLTNPILLAKALELSKDK RPTLKTFFKNAYFSARKYQFMLESFRTK QNDPTYKLNNTYELVSKQLQDYQNT MLLLAKERLLFLEQDLKQKEEEFERAK EHYVKSXHYRETSLSPKEKQGLKQI KQFSKISKDILYTCNEIIGANRFLTHYDN LNLEKVLHAKDTKLEQKEIQAITKEPN NDEPWIEFGKKEQARAKAHYQAMLEK EKAKELAKQQANTLHSELDLDDPKAH AGLKQNDNTNFKGRNR
HP0137	3029	AAACAACGCCGAGCATGATTAGAAATGATTAGCGCGACCGGTGTGTGAAGGGCATTGAAAAATTACGGCGGCC ATTTACCCGTAAGCCCTAACGAAACGCTTTTGTGTTGATTATTTAGGGATTTTGAAGGGAGTTTTTAG TCATTGTGGATGAAAGCCCATGTGAGTTTGCCACAGTTTGGGGGATGTATGACGGGATATGACGAGGAAAAAGTGT TTTAGTGAATATGTTTGTGCTAGCGCTTGTAGACACCGCTTTTAAATTTGATGAATTTATCCATAAAAT TGCCAGTTCTTTTGTGCTGCTAGCGCTTGTAGCTAGAAATGAGCTTTTCAAAAGAAATGCTGCTGAGCAATC ATTCGCCCTACAGGGCTTTTAGACCCCTAAATTTGAAGTGGAGACAGCGATAGCAAGTCCAGGATTTGTTTGTATGA AATCAAGTTAGTGGTGGCTAGAGGTGAAGGGTGTCTATCACCACGCTCACTAAATAAATGGCAGAAATTTGTGCA AATATTGCTGAATGGGCTTGAAGGCGCTTACATGCTAGTGAATGATGCGATTGAAAGGAATCACATCATC CGCTCTTAAAGCTTAAAGAAATTTGACATTTAATAGGATCAATCTTTAAGAGAGAGGCTGATTTGCCCTGAAGTC TCTTAGTAGCGATCATGGATGCGGATAAAGAGGTTTTAAGGAGTGAACCAAGCTCATCAAAAGCCTTTAGAT AGCCGCTAGAAACGCTAATGGCAAGGTTTTATTATACGCTAAAGATCACTCAAGCATGCAAAAGCCTTTGAGAT CACTAGTTACAGGCGGCCAAACAGAGAGTTCAATAATCCATACATCACCCCAACCGTTACGCGGCTT TAGAAGAGGAATGAAATTAAGAGACGATGAAATTAGAATCGCTAAAGCCTTAAAGGACAAATGCCTAAAGTG AAAGGGAAAAATCATTAA	3030	KQRTHELMISATGVCCKGIENYARHF TGKAPNETPFCFLFDYLGIFEREFLVVD ESHVSLPQFGMYAGDMSRKSVLVEY GFRLPALDNRLPKFDEFIHKNCQFLF VSATPNKLELELSKKNVAEQIIRPTGLL DPKFEVRSDKQVQDLFDEIKLVVARG ERVLTTLTKKMAEELCKYYAEWGLKA RYMHSEIDAERNHIIRSLRLKEFDILIGI NLLREGLDLPEVSLVAIWDADKEGFLR SETSLIQTMGRAARNANGKVLLYAKKIT QSMQKAFETSYRRAKQEEFNKIHNTIP KTVTRALEEELKLRDDEIRIAKALKKDK MPKSEREKIIEKDKMRECTKNLDFE EAMRLRDEIAQLRTL
HP0137	3031	CAACCCGTCCTTTTATATGCCCAAGTGTCAAGAGCCCAATTTGATGTGAATGAAGCGTTATACAAACAGATTGAGCAA GAAATCAAAATAAGTTTATAGCCCAACAGAAAGAGTTTGAAAGAGAGTGAATGAAAAAGAGCGCGCAGTATCTAAGC TATTTCAAAATTTAGAGCAAAAGAGACCCCTAAAGAGCGGAGAGAAAGCAACAGGCCAAATTTGATGAGGC GGTCAAAACAGCGAGTGCCTTAGCCTTGCAAGATGAAAGGCTAAGATCATTGAAGAGCCAGAAAAACGCTTTT TAGAGCAGCAAAAGGGCTTGGAATTTGCAAAAGAAATTTGGATGAGAACTCCAAAGTTCAGGAAATGCACCAA AAAGAGCGGAAATTAAGAGGCTAAAGAGAGAAATAACGAAGCCGAGAGCCGATTAAAGCTGAAATGAAAAAA ATTGAATGAAAAATTTGATTGGAGAGAGAAAAATAGAAAAAGCCTTGCAATGAAAAATGAATGAAATTCAGCA GCAAGAGAGCAATTAGAAATGTTAAGAAACGAGTTGAAAAACGCTCAAGAAAGGCTGAATTAAGTTGCAACAAAT CCAGGGGAGGTGCAAGAAATTTGCGGATTGAAGAGTTTTTGAAGCAAAATTTCCCTAGATTGCAATGAAGAAATCA AAAAAGGCAAGAGGGGCGATTGCAATCAAGTGGTGCATAGGAAATTTCAAAATTTGCGGAAAAATTTATTAT GAGAGCAACGCCCAAGAAATTTCAAAAGCTTGGGTGGAAGAGCTTAAAGCGACATGCGAGAGATTGGGGCTG ATGTGGGGTCAATTGTGAGTGAAGCGCTGCCTAAAGAGATGAGAGGATGGGGTTATTGAAGGGGTGTGGGTGT GTTGCTTTGAAGAGTTTAAAG	3032	QTRPFICPKCQEPIDVN EALYKQIEQEN QNKFLAQKQEFKEKEVNEKRAQYLSYF KNLEQKEETLKERKEKEQAKFDEAVK QASALALQDERAKIIEEARKNAFLEQQ KGLELLQKELDESKQVQELHQKEAEI ERLKRENNEAESRLKAENEKKNLNEKLD LEREKIEKALHEKNELKFKQEEQLEML LRNELKNAQRKAELSSQZQFQGEVQEL AIEEFLRQKFPDCEIEIKKGQRGGDCI QVHTREFQNCCKIYYIESKRTKEFQKA WVEKLKSDMREIGADVGVIVSEALPKE MERMGLFEGVWVYCSFEEFK

HP0137	3033	CCAGACAGAAACGCGCGGATAAAGAGCCGGAAGAAAATTCAGCTCATCAATGAAGCCTATGGGCTGTTAAGCGG ATGAAAAGAACGCGGCTTATACGACAGGTATGGTAAAAAGCCTTAACCAAGCCGCGCAAGCCAAAGCGGATTT TTCTGATTTTTTGAAGATTTAGGCTCGTTTTTGAAGACGCTTTGGGTTTGGCGTAGGGAGTAAAGGCAAAA AAGCTCTATCGCACCGGATTTTGAACCCCTTGAATTGAGTTTCAAGAAAGCGGTTTTTGGCTGTAAAAAACCATT TAAAGTCCAATACCAAGAGCGTTTGTGAAGTTGCGATGCGACGGCGCTAAAGACAAAGCCCTAGAGACTTGCAAG CAATGCAATGGCAGGGCGAGGTGTTTATGCGTCAAGTTTTATGAGTTTTGCGCAAACTTGTGGGCGGTGTCAG GCAAGGCAAGATCGTTAAACCCCATGCCAAGCGTGCAAGGGTAAACCTATATCCTTAAAGATGAAGAAATTGAT GCGATAATCCCTGAGGGCATTTGATGATCAAAACCGCATGGTGCTTAAAAATAAGGCAATGAATACGAGAAAGGAAA AAGAGGGGATTTGATTTAGAAGCGCAAGTCAAGAAAGATGAGCAATTCAGCGCGAAGCTGCGATTTATTCATTA AAGCGCGGTTTTCACCACTATCGCTTAGGGCATACGATTAAGTGCCGCTTTAAAGGGGACGAACGGAATGGAA TTAAAAATCCCTAGAAACGCCAGAGACAAAGCAGACTTTTGCGTTTAGAAACGAGGGCGGTGAACACACCTGAAAGCTC TTATAGAGGGAGTTTGAT	3034	PDRNAGDKEAEKFKLINEAYGVLSDE KKRALYDRYGGKGLNQAGASQGDFFSD FFEDLGSFFEDAFGFGARGSKRQKSSI APDYLQTLSEFKEAVFGCKTKIKVQY QSVCESCDGTGAKDKALETCKQCNG QGQVFMQGMFSAQTGACQGGK IVKTPCQACKGTYILKDEEIDAIPEGID DQNRMLKNKGNEYEKGRGDLYLEA QVKEDEHFKREGCDLFIKAPVFFTTIAL GHTIKVPSLKGDELELKIPRNARDKQTE AFRNEGKVHPESYRGS
HP0137	3035	TTTACGCCAGATGAACCTAACGATATTTAATGCTCTCCTTACTGGATGGCTATATCCAAAACGAAAATAAGCGGTTT AGCCCCCTTTTAGCGCGCTTGAAGAAAATTCACCCGATTAGAGAAAGCTAGAAAAGAAAGCGGATTTGTAGAGGA TAAAAAGCGTTTCCAAAAGGATTTAGAGAAAGATTGAATTTGAAAAATGAATTAGAGAGCTGGATTTAAAAAGA AGATGAATACGAAACGCTTTTAGAGCAAAAAAATTTGCTTTCTAGTAAGGAAAACTGAACGATAAAATCGCTCTGGC GTTAGAGGTGCTAGAAAATACCCATAAAATCACGCATGCTTTAGAGAGCGTGGCCATAGCGCGGAGTTTTTAAAAA GCGCTTTATTAGAAAGCGAGCGCTCTATTGAAAAAGAGCAGGCTAAATTAGAAAGAGTGCGAGCGTTTGGACATTGAA AAAGTTCTAGAAAGGCTTGGCATGCTAAGTGGGATCAATTAAGGATTACGGGAGTATTATGCTGCTAAAGAACGATT AGGGCATGTTAAAAACGAATTCACAAACCTAAAGAAATGATAGTCAATTCGGAACCTTACCACAAAGAAATAGAGCG ATTAAGAACCCGAATGCTTGAATTTGTGCGAAGAAATAAGCGGCTTTAGAAAAGAGTATTTAGCGCGTTTTAACGCTCT TTTAAAGCGCTAAAGCGAAAGATTGCTCCTAAAAAGCCCGATTGGTT	3036	FSQNELNDILMSLLDGYIQNENKAFSP LLGALEEKFTRLKEKERRRLLDKKRF QKDLERLNFEMKMLERLDLKEDEYER LLEQKLLSSKEKLNKIALALEVLENT HKITHALESVGHSAEFLKSALLEASALL EKEQAKLEECERLDIEKVLRLGMLSGI IKDYGSIMHAKERLGHVKNELHNLKEID SHCETYHKEIERLKTECLKCEEISGFR KEYLAGFNALLSAKAKDOLLKSPSLV
HP0137	3037	TGTGCGCAGTGGGATTGCAAGGAAGATTGCGCTATTGCACGCAAGCTCACACCATCAAGGAGCGATCAAGCGC TATAAATTTAAGATGAAAAGTGTTTACAAGAGGCTAGAGCGTTAAGACAATAGGGGCTTAGGGTTTTGTCTG GTTACTCAGGGCGGATTAGACGATGAAAAATGCGAATACATCGCTAAATTAGCTAAAGCCCATCAATCAAGAAAGA ATTGGGCTTGCACTAATCGCATGCTGCGGGCGCGGATTTGGAGCAATTAGAATTTTAAAGAGATGCGGGCATC CATAGCTATAACCAATTTAGAGACTTCGCAAAATTTCTCCCTAAGATTTGTTCCACGCACACATGGGAAGAAAG TTTATCACATGCGAAAACGCTTAAAGGCGGGTTAGGCTTGCGAGTGGGGGATTTTGGGCTTAATGAGAGCT GGGAAGATCGGATTTGAATGCTTAGAGCGCTAGCTTCTGCTCCTCGCACACCACGCGGATTAATTTTTCATTAATA ACCCGGTATTGCCCATTTGATGCGAGAGACTTTAAGTGCAGATGAAGCCCTAGATGCGTCTTTGGCTAAGGAATTT TTGCTAACGCTAGGCTTATGTTGGCTGGGGCGTGAAGTGGTTTAAAGATAATGACAAAAAGGAAGCCCAAGC TTTTTGAATA	3038	VRSGDCKEDCAYCTQSSHHQGAIRY KFKDEKVVQLQEARALRQLGALGFLVT SGRELDDEKCEYIAKAKAINQEELGLH LIACCGRADLEQLFLRDAGIHSYNHN LETSONFFPKICSTHTWEERFITCENAL RAGLGLCSGGIFGLNESWEDRIEMLR LASLSPTTTPINFFIKNPVLPIDAETLSA DEALECVLLAKEFLPNARLMLVAGGREV VFKDNDKKEAKLFE
HP0137	3039	TTTGAAGCGTTTCTAAGGATTTTACCACGATAATTTGGAATTTAACCCAGCGAGTGGCCTTTAATCATTAATTATG TGAACACCATTTTTAAAAAGCTTATCAAAATTCGCCACCGCTTATTTGGAGCAAAAATACCTTAAACCTTCTCAAAA TAAACATGTTACAGACGCTATGTTAAAGTCTCTTAGTGGCTGATGAAAGAGAAATTGTTATTAGATCAGGCTTACA AGAACTCAAAACCTTTAGAACATCGTATTGAGCCTAAAGATATTACCAATTTATGCGCCACTAATGACGACGCTTT AGAAATCAAAATTTTGAAGAGCGTTTGAAGTGGGATTCGCCAAGCACGGAATCTAGCGCAAAATTGCTCTCAATT TGTAGAGTCTAAATCATTAGAACGCTTTAGAATACGCTCTAGCGGAAGAACCTTACAAGCCTTTTATAAGCACAG CGTTTTAAACTCGCTGGATACTTGATGATGATGCGTATTAGCTGGTTTAAACCTTAAAAAGAGAGCGGTG CAGGCTTTGTGGAAGGTGATGGAGCAATTTGAGCTTTATGGAGAGCCTGCACAAAGCTGTTTGGAAATTAGCGGTT GGGTGCGAAGATGCCGATGGATTTTAGAAAAATTAGAGACTAAAGCGATCGCTTCTCCCATTCACAAAGCGCGCA GATCATGACCATTCACAAATCTAAAGGCATGCAATTCCTTATGTGATCGTGTGCGAAG	3040	FESVSKDFYHDNLEFNHRSAPLIINYVN TIFKKAYQNSPTAYLEQKYPIKTSQNKH VTDGYVKVSLVADERELLDDQVLQEAQ NLLEHRIEIPKDTILCATNDDALEIKNYL QERLSAIRPSTESSAKLSQFVESKIKN ALEYALAEPEYPFYKHSVLKLAGYLH DDAIALAGFNPKKESVAGFVWKVMEQ FELYGEPAQSCLELAVGCEADADGFLEK LETKAASSHSKGAQIMTHKSKGMQFP YVIVCE

HP0372	3041	TGAAAGCTTATTAGATTGATCCCAATCGCATTTTGGCAAAAACGCCACCCAGCCACAGACTAGACTATGAAACGA GCGGGTTGTTTAGCGGCAAGACCTTACAAAGCGTTAAGGATTTAAAGCGCTTTTATGCAAAAAAAGTAA AAAACCTTATTAGCACTAGCGCATGGTTGGTTGAAAAAAGCATGAAATAGACAAACCCATTCTAACGCCACAAAAC ATTCAAAAAGATTGACATTCGATCTAAATTTCTCTTTAGGCAAGCAATCAATCACGCTTGTGAGCCTTTAAAGCT ATAACCCCTTTTGGATATAAGCOTACTCAAAATCACCCCACTCACCGGCGCACCGAGATCCGCTTGCATTTAA GCAGCGTGATCATAGGATCGTGGTGAGGGGCTTTATGGGTGGCAGATGAAACGCTAGGGAGTATCTTCAATT AAAGCGTGAAAATAACGCCCACTTACTCATGCTCCATGCCGCTAGTTAGAGTTTGAATTTAAAGGAGCGATCTATAA AATCGCTTCCCCCATGCCCTGAACGCTTCTATGCCCTTTTAAAGATCTATCCTTTTATTTTATGATGATCTTTTGGTTGT CCTCTTCTGGGTTTGGTTGAGGTGCGCTATATGTTCTTGTGATGGTTTCTCCACCAACAGGAGCGCTTTTAAAC TCTTTTGAATTTCTGGCTGATTTTAAACA	3042	ESLLDCIQSHFGKNAHPAHRLDYETSG LVLAGKTLQSVKDLKALFMQKKVKKTY LALAHGLVEKSMKIDKIPILTPQNIQKDL HIRSKISPLGKQSITLVEPLSYNPFLLDIS LLKITPLTGRTHQIRHLHLSSVDHHRIVGE GLYGVADENAREYLQKRENNAPLLM LHAASLEFEFGAIYKIASPMPEFMPF LKDLSEFFY
HP0372	3043	TGAGCAGTTACGGGTATGATATTAGAGTGGGAGTGAGTTCATGCTCTTGATAACAAAAACGCTTTAATTGACCCCTA AAAACCTTTGACCCCTAACACCGGACTAAATTTGATCGGAGTAAAGAGGTATTTATCTTCCCGCTAACCGCTTCG CCCTAGCCCATACGATAGATATTAAATGCCCTAAAGACACTTTAGCGATTTGTTAGGCAAAAGCACTTACGCTA GGTGTGGGATTATTGTGAATGTTACGCCCTTTGAGCCGGAATTTGAAGGCTATATTACGATTGAAATTTCTAACACCA CTAATTTACCGGCTAAAGTCTATGCCAATGAGGGGATCGCGCAAGTGTTGTTTTTACAAAGCGGATGAAATGTGCGAG CAAGCTATAAGACAGAGCGGTAAAGTAT	3044	SSYGYDIRVGSSEFMLFDJKNALIDPKN FDPNNAKIDASKKEYFILPANAFALAH TIEYFKMPKDTLAICLGKSTYARCGIIVN VTPFEFEFEYITIEISNTNLPAKVYAN EGIAQWVFLQDEMCEQSYKDRGGKY
HP0010	3045	TAAAGAACGGCGACCCAGCATCAATCAAGAGATCGCTAAATACCATGAAAAAAGCGATAAAGCGCTTTGGGGCTTT ATGAATTGCTAAAAGGGCTACCACTAATCTTAGTTTGCAGCGCAAGAACTCAGTGTCAAGCAAGCGATGAAAAAC CACACCATCGCCAAAGCGATGTTTTGCCCCACTTTGAACCGGAGTTATAATTTAAATGAAGCTAGGGATCTCCA GAATATAAGCATTATAACACCCCAACCACTCCAACTCAAGTCAATGATGTTTAAATGGCTTTAGCGGATGTGAAT AATGTCAAGGAAAGTCTCGGACTTACCGCTCCAACTGTTGGCTAATTTAGAAATATAGCCGCCAGAGCGGTGATTTGCA AGTGGTGCAACAATACTACGAGTATTTTAAACAATCTCGCTCGCATGATCGCTTTGCAAAAAAATTAGAGCAAAATCAA AACGGACATTAAAGGGTTACCAAGCTCTATGACAAAGGGCTGACCAAGTGTGATGATTTGCAAAAGCTTAAAGCGC AAGGGAATTTGAGCGAATACGATATTTTGGACATGCAATTTGCTTTGGAGCAAAACCGCTTGACTTTAGAAATACCTTA CCAATCTCAGTGTGAAAAATTTGAAAAAGACCAAGATGATGCGCTAATTTGCAATTAAGAGAAAGCGAGGATTTAG TTTCTTTAAGGGAGCAGATTTCGCAATCAGATACCAAAACAAAGCAACTCAATTTACCCCAAGATAGATGTGTTTG ACTCATGGCTTTTGGATCCAAAACCCCGCTTATGCCACAGGGCTTTTGGGAATTTCTACCCCGGTGAGCAAAAT ACGGCTGGGGTTACTGCGACTTTGAATATTTTGTATGATATAGGCTTGAGCTTGCAAAAACCAATCCATCATGCTAGGC CAATTAGCGGAATGAAAGAAATTTAGCGTATAAAAGCTAGAGCAAGAAAAAGACGAACAGCTTTACAGAAATCGCTT GATATTGCCAGAGCC	3046	KETATTINQEIYHEKSDKAALGLYEL LKGATTNLSQAQELSVKQAMKNHTIA KAMFLPTLNASYNFKNEARDTPEYKHY NTQLQAQVTLNVFNGFSDVNNVKEK SATYRSNVANLEYSRQSVYLQVVOQY YEYFNLRMIALQKKIEQIKTDIKRVT KLYDKGLTTIDDLQSLKAQGNLSEYDIL DMQFALEQNRLTLEYLTNLVSKNLKKT TIDAPNLQLRERQDLVSLREQISAIRYQ NKQLNYYPKIDVDFDSWLFWIQKPAYAT GRFGNFYPGQQNTAGVTATLNIFDDIG LSLQKQSIMLGQLANEKNLAYKKLEQE KDEQLYRKSLDIARAKIESKASLDAAN LSFANIKRKYDANLVDITTYLRGLTTRF DAEVAYNLAALNNYEVCKANYIFNSGKH IDDYVH

HP0010	3047	AAATGAAGCTCCAAAAAATGAAGTTCAAAGAAATGAAGCTCAAAAAGAAACCCCAATCCAATCAACGCGCTAAAGA AATGAAAGTCAAGTCCATTCTTATGTGGGCTTTCTTACATGTCTGACATGCTCGCTAATGAATGAAATGTAAGATTCGT GTGGCGGATATTGTGATTCTAAAAAATAGACACCGCTGTTTGGCTTTGTTCAATCAAGGGTATTTTAAAGACGTT TATGCCACTTTTGAAGGGGCATATTAGATTTCATTTTATGATAAAGCCAGGATTGCCGGGTAGAAATCAAGGG TTATGGACTGAAAGGAAAGACGCGCTTAAATCCCAATGGGATCAAAAAGGGCGACACCTTTGATGAGCAAA AATTAGAGCATGCTAAAACGGCTTAAAACCGCTTAGAGGGCAGGCTATTATGGAGCGTGGTGAGGTGCG CACAGAAAAGGTGAGTGGGTGCAATTATTGATCGTGTGATGTAATCTTTGAGTGGCAACAGCAACGAGATTTTCATG CCATTTATAGGGGAGCGGAAATTAACCGCGCATGATTGAATCTTTGAGTGGCAACAGCAACGAGATTTTCATG GGCTGGATGTGGGCTTGAATGACGGGAAATGCGTTTATGATCAACTAGAAATCGATTCTATCGTATCCAAAGATGT GTATATGCGTAGGGTTACTTAGACGCTCATATTTCTCGCTTTTGAACGGATTTTCTACCCATGACGCTAA GCTTCATTATAAAGTCAAGAGGGGATCCCAATACAGGATTTAGACATTTTAAATAGAGATTGACAAACCGGTAGTCCC CTTAAAAACCTTAGAAAAAGCGCTTAAAGTGAAGGAAAGATGTCTTTAATATTGAGCATTTAAGAGCGGATGCGCA AATTTTAAAAACCGAAATCGCGATAGGGTTATGCGTTTGGGTGTAAGCCAGACCTTGATAAGATGATAAGATGAAAAA ACGGGCTTGTGAAGTC	3048	NEAPKNEVQRNEAQKETPQSNQTPKE MKVKSISYVGLSYMDSMLANEIVKIRV GDIVDSKKIDTAVLALFNQGYFKDVYAT FEGGILEFHIDEKARIAGVEIKGYGTEK EKDGLKSQMGIKKGDTFDEQKLEHAK TALKTALEGQGYGYSVWEVRTEKVSE GALLIVFDVNRGDSIYIKQSIYEGSAKLK RRMIESLSANKQRDFMGWMMWGLNDG KLRLDQLEYDSMRIQDVYMRRGYLD HISPFLLKTFSTHDAKLHYKVEGKIY RISDILIEIDNPVPLKTELEKALKVKRKD VFNIEHLRADAQILKTEIADKGYAFV KPDLDKDEKNGLVKVIYRIEVDGMVYIN DVIISGNQRTSDRIIRRELLGPKDKYNIL TKLRNSENLSRLRGFFFSKVIEEKRVN SSLMDLLVSVEEGRTGQLQFGLGYGS YGGLMLNGSVSERNLFGTQMSLSYA NIATGGGRSYPGMPKGAGRMFAGNLS LTNPRIFDSWYSSSTINLYADYRISYQYI QQGGGFGVNVGRMLGNRTHVSLGYN LNVTKLLGFFSPLYNRYYSVNEVSP RQCSTPASV
HP0010	3049	CCCCATTATGGAAAAAGATCACGCTTTAATTTAGGGGCTAGCACGCAAGATCCTAATTACAGCCTAAGCCATGCGA TCCGATCAAGAAGTTTATTTTGAATTAACCCCTTAAACAAAGAGCGATTAGACAGGCTTTCGCTAAAGCTTTAA CATTGCTCAAAAAACAATAGAGCCTGGCGCTAAACCTATCTTTAAACAACAGCGCTGGCGACGCTAGACGCTTA TTAAACCTTTTAGATTGAGCGCTAAATAGAAGATCCTATCACCTTAAACAGCTACATCTTACGGCTCATAGCC TAAATGATGGATCTTATAGCGATGATACGCTTAAACCTTACAGCGCTTAAATCAATCTTTAAGAGGGAGCGATG AAAACGCTTCCATCTATTATCTGCGCGCTTGAATGCTGGCGGAAACCCGGAATTTATCGCCAGAGGCTGGT GATTTTTCGAGCGGAAGATATTGGTAACGCTAACCCGAAACGCTTAAATAGCCGCTTCTTGTGTTGTCAGTCAA ACAAATCGCTACCTGAAGCGCGCATCATTTTAAAGCCCAATGCGTATTATCTGGCTTTCGCCCCAAGTCTAACA CGCTTATAGAGCGCATCAATCAGGCTTTGATTGCTTCAAAAAGGCTCACTACCTATTCCTAAACACCTGCTG CCTAACGCTAAAGATTACCTTACCGCATGATTATACGGCTATGTCAAACAAGATTATTGGAAAAACCCCTAGAT TTGGTTTCTCTCAAGGCATAGGATTTGAAAAACCCCTTTAGAAATGGCTTGATAAGATAAGAAATTGATCTTATAAGT TACATTAA	3050	PIMEKDHALLIGASTQDPNYSLSHAIRS RSFIFELTPLNKSOLDRLCAKALTLLK QIEPGAKTYLLNNSAGDARALLNLLDLS AKIEDPITLKTQLSLRPHSLNDGSYSDD THYNLTSAIKSLRSGSDENASIYLLARLI AGGENPEFIARRLVIFASEDIGNANPNA LNLAASCLFAVKQIGYPEARILSQCVY LACSPKSNATYRAINQALDCVQKGSLY PIPKHLLPNAKDYLPHDYNGYVKQDY LEKPLDLVSSQGGIGFEKTLLEWLDKIRN
HP0010	3051	GGGAGCCTTCAGCGTTTGATTGCAAAAGTGGGCTACCAAAAAGAACTCAAGCAGTTGCAATCAATAGTAAGAA TTTTCTAATATTTGACCAAAATCCATTGCAAGTAGAGGCTAACACTCAAGCTCAAGAGGTTTGAGAAGCGTTTA TGAGGGCGAGGCTAATAAGATTAAAGATCTCAATAACGCTATCTTCCCAAGAAGATCCTTACGAGCCTTAAAGC TTGCAAGAAGTGCAGGCTAACCGCTTAAGCAGCAATCGCAACTTTAGAGGATTTGAGGAATGAGATTCAGGCTA ACCAGCAAGCTATCCAGCAGTTAGACAAGCAAAATAAGAGATGAGTGAATTTAGCCAAAGTTAAGCCAGGATTTG GTTTCACAAATCGCCTTAATCCAAAAGCTCTCAAGAACAAGAGGAAAGCTGAAAGCCGCTCAAAATCAAAACGC TCCGGCTAATAAAACCCCTCTTTGAAAGCCGAATCCCAAAAATCAAGAGGAAACCTCAAGAAAAGCGGAAAA TTGAGTTTGATAAAGACTTGTCTAAGCAAAAAGAGATCTTTCAAGAGCTCTGTCTTTTAAATAAATCTCTATGC AGAAGCCAAAGAGCGTTTGTGTTGTTAGAGCCCAATAGTTACAGACTTTATTATGTGCGTTATGTTCTTGGAGAAGT GGCTTATGGGAAAGAGATACAGAGAAGCGATCAAGTATTACAAAGAGAGCGCTCTTTTAAACAAAAGCGCTCTT ACATGCTGTGCTTTTGTGGCATACGGCATGGTCTTTTAAAAAATCAA	3052	GEPSAFDLQSGATKKELKQLQINSKNF SNILTKIHSQVEANTQAQEGLSRVYEG QANKIKDLNNAILSQEESLRALKASQEV QANTLKQSQSTLEDLRNEIHANQQAQ QLDKQNKEMSELLTKLSQDLVSQIALIQ KALKEQEEKAEKPLKSNAPANKTPSLK AESPKNQEGKTQEKAKIEFDKLSKQK EIFQEALSFKNKSYAEAKERLLWLEA NSYRLYYVRYVLGEVAYGEKRYREAIK YYKESALLNKKASYMPVLLWHTAWSF KKI

HP0010	3053	GACGCTAAAGAAATCGCTATGCAACGATTGACAAACAAACCATAAGATTTTGAATCCTTCCGGGATAAAGTGAGCGCTAAAGACAAATGTATAACCGCATCAGGGAATCGCATCTTATTGAATATGATGTGTATATTCTAGCGGACAAAGGTGCGTTATGACACTAAACCAAGAGCGTTATTAGAGGGAATATCAAGTTTATAGGGCGGAGGTTTCTCGTTAAACCGATTACGTGAATGAGTTGAATGAAAAATATGAATCATTTCCCTTTTATGTCCAAAGACAGCGTGAGCGGATTTGGTGAGCGGATATTGCCAGCGGAAGGATCAAAATATAAGGTTAAAAACATGAGCACTTCAGGGTGCAATCGATTAAACCCCATTTGGCATGTCAATCGCACTTCAGGCTCATTCACATGCAAAATCGCATTTGTCTATGTGGAATCTAAGATCTATGTCGGTGATATTCTGTATTGTTGCTATATTTCATGTCCACGAGCAATAAAAGAACTACTGGGTTTTTATACCCCTGAGTTGGCATTCCAACTTAGACGGCTTTATTTATTTGCAACCTTTTATTAGCCCCCAAAAACTCATGGGATATGACCTTACCCCAAAATCCGCTATAAAGGGTTTTGGCTTGAATTTGAAGCGCG	3054	DAKEIAMQRFDKQNHKIFIELADKVSADNVITASGNAILNYDVYILADKRYOTKTKEALLEGNKIVRGEGILVKTDYVKLSLNEKEYEIFFYVQDSVSGIWVSADIASGKDQKYKVKNMSTSGCSDNPIWHVNATSGSFNMQKSHLSMWNPKIYVVDIPVLYLPYIFMSTSNKRRTTGFLYPEFGTSNLDGFIYLPQPFYLPKNSVDMTFTPQIRYKRGFGLNFEA
HP0371	3055	CCCTCAAGTTTGTCTAGCGTAACGGGCTATAAGCTTTGTGAGTGCCTTTGGGATGCGGGCTGCCTAGAGATGCGCTCATTTACTTGCCTCTAAAGGGAGCGGATATTAGCGAACATCTTTAAGAGATGAAAGCATCCAGTTTGCCATTTTAAACGGGGCGGAGACACCGCTTATAAATGTTAAAGCTAACCCACTTAGCCTTGAGCGCTGAAACAGCGGTAAACGCCACCAATTGTGAGCAAAATGGCAGACAGACCGGATTAAAGATGTTATCCATTGAGCTTTTAGCAATTCCGGGCAAAATGCTCCGCCACTTCGCTTTTAGTATTAGAAAAGAACTATGAAGATGAGAACTTTAAAAAGACTCTAATAGATGCGACTTAAGCCTTAGCGTGGCGATCCTTTGATTTCAAAACAAAATCGCGCTCTAGCGGACAAGCCTAATGAAAAGGTCATCAAGCCATAGATGAATTAAGAGCTATGAAATACGAAATCCCGTAAGCTTTGTCAATGATAACCCCTATTTGATGAAGCCCAAGCATCAATACGGCACTAAAGGCGATTTCACGCAACCAACTGAGCTTTTACGCCCATTTATCCGTGATGGAAGCAAAAGATTAGACGAAGGATAGAAATAGCCAAATCTACCGTTACGGGCTGACTAGCGGTTAGAGTCGTTGGACGAAGGAGTGGGAATATTATTAGAACGCATTGAAGCCGGTAATATCTATATCAACAAGCCACCAAGAGGATTGTCTTCGCCAGCCCTTTGGGGGGTTAAAAATCCGCTGTGGGTTTGGGAGAAAGTAGGCATTTTCAACTATATCACGCAATTTGTGAATATCTGCCAAGAAAGAAAGACGAAACGCCTTAAACCCCTTAAGCGAAGCCTTAGAAAACCTTAACCTCAAAAGGCTATGATGAGCATACGCATGAGTTGAAGCGCGCGGATTTTATGGCAAAAAGCTACG	3056	PSSLSSVTGYKLCECFWDAGVPRDALIYLPKSGSDISEHLLRDESQIFAILTGEDTAYKMLKANPTLALSAETGGKNATIVSKMADRDOAIKNVIHSAFNSGQKCSATSLLVLEKEVEYEDENFKKTLIDATLSLVGDPDFKNGKIGALADKPNKVIKAIDELKSYENYEIPVSFVNDNPYLMKPSIKYGTCKGDFTHQTELFPTILSVMEAKOLDEAIEIANSTGYGLTSALESLEDEREWEYLERIEAGNIYINKPTTGAIVLRQPFGGVKKSAGVGRKVGIFNYITQFVNICQEEEDENALKNPLSEALENLTKQGYDEHTELKRAIFMAKSYAYHYKHHEFSQTKDYVKIRGEDNLFSTYTKVKSVGVYRTEKDTLSDMLG
HP0371	3057	CGCAATCTGTTTTTAAATCAATGCCAAGATCGGATCAGTTTCAACCAACAGCACGAATTAAGCTCTGGTTGTATCAATGCAAGCTAAAGCGTGTGTTGACAAATCCAAATTAAGCGTTTCAGTGGGACAAAGCAGTATTAAAGCCAAATGCGATCAATCTTTCTCAAAATGCCCTCTATTAATGCGAGCAACCATTCAACTTAGAACCTTCAAGCGGATTTGAATGTGACGACACCGAGCTCGCTCAACCTCAACCAAGCACGATTAATGTTCCCAATAACGCCACGATCAACGATTATCGGAGCTTGATTGCGAGTAATGGCTCTACCTTAATTTAACGGGGCGGTTAATTTCAATTACGCGAATATTACTACGAGTTTGAATAATTCCTCTATCGTGTAAAGGGGGCGTCTCTTAGAGGGCGGTTAATTTAAGCAATAACTCTCTTAGATTCCAAAGGCTCTAGCGCTACCTCTAACACGGCGTTAATTTCTATGATAACGCTTTTCTCAAGCCCCCATCACTTCCATCAAGCCCTTGACATTAAAGCGCCCTTAAGTTTGGAGGCAACCTTTAAACCCCTAACCAACAGCAGCGTGCTGGATTAAAAAACAGCCAGCTTGTTTTGGCGATCAAGGGAGTTTGAATATCGCTAACATTGATTTACTAAGCGATCTAATGATAATAAAAATCGTGTGATAAACATCATTCAGCGGACATGAATAGTAATTGGTATGAGCGTATCAGCTTCTTTGCGATGCACATCAATGACGGGATTATGATGCTAAAAACCAAACTTATAGTTTCACTAACCCCTTAATAACGCCCTAA	3058	QSVFKFNKNAISFTNSTNLSSGLYQMOAKSVLFDNSNLVSVGTSSIKANAINLSQNASINASNHSTLELQGDNLNVNDTSSLNLNQSTINVSNNATINDYASLIASNGSHLNFNGAVNFSANITTSLNSSIVFKGAVSLGGQFNLSSNSSLDFQSSAITSNTAFNFYDNAFSQSPTTFHQALDIKAPLSLGGNLLNPNNSSVLDLKNSQLVFGDQGSNLIANIDLSDLDNKNKFNVYNIQADMNSNWYERISFFGMHINDIGYDAKNQTYSTNPLNNALK

HP0371	3059	TCATGTGTATACACGCGAATCTGGTCTCGCAATCGTATAGGCACCGGTGGGCGAGCTAATCTAATCTTTAATG GGGTAGATAGTATCAATATCGCTAACGCTACCATCAGCAACATAACGCCGAATCTATTCAAGCTCTATGACTTTT CCACGCAAGCATGGATAATTCGAGAAATTTGAATGCTCTAAATCTAACGGCAACCTTTTCGGTGTATGGCACCCTT TCACTAACGGAAGCTAAGATGGGAATTCATTTCAATGCGGCAAGCGGTTTTGAAACACACCACTTTAATGAG GGAGTTACCAATTCAGCGCGATAGCTTGAATTTTCAACAACACCAAGTTCAATAGCGGTTCTGTTGAAATTAGCG CAAAAACGCTTCGTTCAATAACGCTAATCAACAGCGCTCTTTAATTTCAATAATCTAACGCGACCACTTC GTTGTGGGATTTCACCTAACGCTAATCAATTTCAATCGCGGGAACGCTTTTTGGAACTCTACTAATGG CTCTCAAAATACCGCTAATTTAATAATACCGGCTCTGTTAATATTACGGGAATGCAACCTTTGATAATGTGGTGT AATGGCCCTACGAACACGAGCGTGAAGGGCAGGTACTTTAATAACATCACCTTTAAACCACTGAAGCGCCCTTT GTCCTTTGGCGATGGACGATTACTTTAACGCTCATTGCTGATTAAATTTGCTGAATCTATCACCTAATGGCAACCC TATCACTCTTGTAGCTCTTTCAAGAAATTTGAATACAACACGCTTTTCAAGTAAATCTATGGCAGCTCATCACTAC CAAGGGCATGGGCAAGCAGTGAAGGCTGCTCTAGCGGGTAAATGCGGTTATGATGTGGTGTATCTTTCA ATAACCAACCTACAAATTTCCAAGAGGTTTTTCACAAAACAGCAATTTCTATCCGGGTTTGGCGTTAACATGGTGT TTGATTATGTG	3060	HVYITANLRSGNRIGTGGAAANLIFNGVD SINIANATITQHNAGIYSSMTFTSQSM DNSQNGLNLSNGKLSVYGTFTTNEA KDGFIFNAGQAVFENTNFNGGSYQF SGDSLNFNNQFNQFNSGFEISAKNASF NNANFNNSASFNNNSNATTSFVGDF TNANSNLQIAGNAVFNGNSTNGSQNTA NFNNTGSVNISGNATFDNVVFNPTNT SVKGQVTLNNITLKNLNAPLSFGDGTIT FNAHVSINIAESITNGNPITLVSSSKEIE YNNAFSKNLWQLINYQGHGASSEKLV SSAGNGVYDVVYSFNQTYNFQEVFS QNSISIRRLGVNMVFDYVDMKSDHLY YQNALGFMTPNPSYNNNLGNANNTI YYYDKSIDFYASGKTLFTKAE
HP0371	3061	GAATAGATCGTTATGAACCTTTCTGAAATGAAGAGTTGATCAAGAATTTAAGCTTCTGATTTGGGCGCATTTGAAT TAAAGCATGAGCATTTGAGTTGTTTGGATAAAGATCCGCTTATGCGAAAAAAGTGGTTAAATCCCGCCCAT CTCCAGCCCCCATTTAGTAGAGCGAGCATGCCAAGCTCCAAACCCCTGTGCTATGTTGATGACCCCTATTGT GGATAAAAAGAGATTTGCTGCTTTCCGCTATGGTAGGCACTTTTATCATGCACCCCTCCCTGGGCTGAGCCTT ATGTCAAAGCGGCGATACGCTTAAAGGCAATCGTGGCATTGTAGAACGATGAAATCATGAATGAAAT GAAGTGGAAATACCTTGAAGGTGTTCTGTTGAAGTGGAGACGCTCAACCGGTAGATAACGGCACAAAACCTCA TCAAAGTTGAAAAGCTTTAAATCCATGAATAAGTGAATAAAGAAATAAAGGTAGAAAAAGAGCTTTTCACG CATTITGATCGCTAATAGAGCGGAGATCGCTTTAAGAGCGATCCAAACCTTCAAGAAATGGTAAAGATCCATAG CCATTTATCTATCGCTGACAAAGGACGCCCACTACCTCAATACGGCTAGCGCAAAAGTGTGTATAGGGGGCCAA ATCCAGCGAGAGCTACTTGAATATCCCTCGCATATTAGCGCGGCAATTTGTAAGCGGATGCGATTTTCCCGG GGTATGGGTTTTGAGCGAGATCAGAAATTTGTAGAGATTTGCTCGCACCATTTTGAATTTATTGGTCCAAGCG CGAAGGTGATGCTTTAATGAGCGATAAATCCAAAGGCCAAAGCGTGTGAAGGAAGCGCGCATGCCGTGTGATTGA GGCAGTGTGGGTTGCTTAAAGCTATCAAGAACTGTAAGAAATCGCTGATAAAATCGGCTACCCCTGTCATCATTA AAGCAGCCGCTGGTGGGCGG	3062	IDRYEPF
HP0371	3063	AGCGAGTGTGGATAACTTAGATGACCCCTACTGATCAAGAGGCCCATAGAGCAATGTTTAGAGGGCTTGAGCGATAG TGAAAGGGCGCTAATTTAGGAATTAACGACAAAGCTGATGAAGTGGATCTGATTTATAGCGATCTAAGAAACCGTA AAACCTTTGATAACATGCGGCTAAGGTTATCCATTGTTACCAATGGATTTCAAAAATGGCGGCGATATTGCCACTA TTAACGCCCACTAATGTTGATGCGGACAAATAGCTAGCGATAATCCTATTATGCTTCCATAGAGCCTGATATTGCCA AGCAATACGAACAGAAAAACCATTAAGGATAAGAAATTTAGAAGCTAAATAGCTAAGGCTTAGGTGGCAATAAA AAGATGACGATAAAGAAAAAGTAAAAATCCACAGCAGAAAGCTAAAGCAGAAAAACAATAAGATAGACAAAGATGTC GCAGAACTGCCAAGAAATATCAGTGAATCGCTCTTAAGAACAAAAAGAGAGTGGGAAATTTGTAGATGAAAA TGTAATCCCATTTGATGACAAAAAGAGCAGAAAAACAAGATGAACAGCCCTGTCAACAGGCCCTTTATAGGCA AGAGTGATCCCACTTTGTTAGCGCAATACACCCCTATTGAATCACTCTGACTTCTAAAGTAGATGCCACTCTCA CAGGTATAGTGAGTGGGTTGTAGCCAAAGATGTATGGAACATGAACGGCACTATGATCTTA	3064	SECLDNLDPTDQEAIEQCLEGLSDSE RALILGIKQRADEVDLIYSDLRNRKTFD NMAAKGYPLLPMDFKNGGGDIATINATN VDADKIASDNPIYASIEPDIKQYETEK IKDKNLEAKLAKALGGNKKDDKEKSK KSTAEAKAENNKIDKDVAEAKNISEIA LKNKKEKSGEFVDENGNPIDDKKAEK QDETSPVKQAFIGKSDPTFVLAQYPIE ITLTSKVDATLTGIVSGVWAKDVWMMN GTML

HP0371	3065	GAAAATCTCACTAAGCTATGAGTAACCCACAAAATTTGAGCAATAACAAAATCTTAGCGAATTTATCAAGCAACAA CGAGAAATGAATTAGACCAATGAACGACTAGAGGACATGCAAGAACAGGCTCAAGCTAATGCGCTCAAAACAAAT TGAGAACTCAACAGAAACAAAGCTGAAGAGACAAATCAAGCAAAAGAGCCAAAGATAAAATCAATATTAAGACAGATAA GCCTCAAAAAGCCCTGAGGATAACTCCATAGAAATATCTCTAGCGATAGCGCTTGAGAACTAATCTGTTGTGC GGACTAATAAAGCCCTTGATCAATTCATTTTGAGAAATAGCTCAAAAAGACAAATTTGCTTCAGCGTATCTAACAGTCAA ATTAGAATACCCACAAGACACGAAGTCTCTAGCGTTATTGAAGAGGAGTTAAAAAGAGAGAAAGCAAGCAAGAGGC AGAAAGAAATTGATTAGCAAGAAATCTTAACACACAGCTACATCAATAGAGTGATGATGCGGAGCAATGAACAG ATTATCAACAAAGAAATAAGAGAAAGCAAAATTTATCTTAGATCAAGCAAAAGCGCTAGAGACTCAATAT GTGCATAATGCCTTAAAAAGAAACCCGCTGCCTAGAAACTACAACCTACTACCAAGCGCTGAAAAACGCTCTAAACA TATTATGCCCTCTGAAATTTTATGATGATGACATTCACCTATTTTGGTTTCAAAAACATCACTCTCCAACCTGCTATTT TTGTGGTTCAACCTGATGGAAATTGAGCATGACTGATGCGGCCATTGATCCTA	3066	ENLTNAMSNPQNLSNNIKNLSEFIKQQR ENELDQMERLEDMEQEQAAQANALKQIE ELNKKQAEETIKQRAKDKINIKTDKPK SPEDNSIELSPDSAWRTNLVVRTNKA LYQFILRIAQKDNFASAYLTVKLEYPOR HEVSSVIEEELKKREEAKRQKELIKQEN LNTTAYINRVMMASNEQIINKKEKREEK QKILDQAKALETQYVHNALKRNPVPR NYNYYQAPEKRSKHIMPSEIFDDGTFT YFGFKNITLQPAIFVVQPI>DGKLSMTDA AIDP
HP0371	3067	TATTACAGGGGTTTTAAGGCCAAAAGACATTTTATCACAGGGGCTGTTGGATCGGGCAATGAGTGGAACCCGGTG GGGGGCGGATACCTGTTTTGAAAGCTCAAACGAATTAAGCGCTAATGGGCTTATTTCAAATAACAGAGCCGGG ACGCAAACTCTTGATCAATTTGATTTCCAATAACAGCGTGAATTTGACAAACACAGATTTTGGCAACCAACCCCT AATGGGGCTTTAATGCTATGGGCGGAAAGATCACCTATAATGGCGGATTGTCAATGGCGGAATTTTGCTTTGA TAACGTGGATAGCAATGGCGAACCAACCATTAGCGGAGTAACCTTCAACAATAACGGCGCTCACCTTATAAGGGTG GGAATGGTATTGGGGGAGCATCACCTTCACTAACTCTAATATCAATCAATCAAACTCAATCTTAACGCTAATAGCG TTACCTTTAATAACAGTGTCTTAGGGAGTATGCCCTAATGGCAAGCTAATACTATAGGAAACGCCCTATATCTTAATG CAAGCAATATTACTTTAATAATTTGACCTTTAATGGGGATGTTTGTATTAATACCTGATGCTCATGTTAATTTT CAAGGCACAACCCAGATCAACAAACCCACTTCGCTTTGTCAATATGACCGGTAAAGTTACTATTAACTCAATGCG ATTTTAAACATTCAAATTAACGCTTAGTATAGGAGCGCTTACACGCTCTTAGCATGAAAAATGGCTCTATCACCC TATAATGATGTCAATAACTTATGGAATATCATCAGGCTTAAAAACACGCAAGCCACAAAAGACGCTGATAAAAAATCAT ACAAAGTTCAAATAACAAACCCACACTTACTATGTAACCTACAATTTAGGC	3068	ITGVFKAKDIFITGAVGSGNEWKTGGG AILVFESSNELSANGAYFQNNRAGTQT SWINLSNNSVNLNTDFGNQTPNGGF NAMGRKITNGGIVNGGNFGFDNVDS NGATTISGVTFFNNNGALT YKGGNGIGG SITFTNSNINHYKLNLANAMSVTFNNSAL GSMPNGNANTIGNAYILNASNITFNLT FNGGWVFNIPDAHVNFGQTTTINPT SPFVNMTGKVTINPNAIFNIQNYTPSIG SAYTLFSMKNGSITYNDVNILWNIRLK NTQATKDADKNHTSSNNNTHTYVVTY NLG
HP0371	3069	CATCCCTAAATCTAACAGCAGCGTGCGTTTTGGGGGTATGAGGGAGTCAATGGGGAAAAACGGGCTATATTACT GGCACITTCACAGCCGATAGGTTTATATCACCGGTAACTGATGACTGGTAACGGCGCTCAAACCGGTGGGGGG CGACTTTGAATTTGTGGCGCGACTGAAATTAATATCGCTGGAGCCACTTTTAAACACCTAAACACCACTTCACAAA ACTCTTACATGACTTTTATGGCATTAGGGGATAGCTCTGGAGCGCTAAGATCAATGTTTCTCAATCTGATTTTACG ATTGGACGGGTGGGGGTATGATTTACCGGTAAATGGCGTTTGTATAGCGTGAATTTCAACAA	3070	IPKSNSTVRFGGYEGVNVINGKTGYITGT FTADRVYITGNMMTGNGAQGTGGGATL NFVGATEINIAGATFKNLKTTTQNSYMT FMALGDSSGSAKINVSQ:SDFYDWTGG GYDFTGNGVFDVSVNFN
HP0371	3071	TGGGAAAACCTCAGGGGCTGAATGGGGTTAGTGGGCTATATTCAAGCGCTTTTAAAGCCAATCAAATGACATTA CCGGCACGATTGCTCTGGTAATGGGGCCAAAACCGGTGGGGCGGACTTAGTGTTTAAACGCTCAAAAGCGTTT GAATATCGCTAACGCTCATTTGAATAACGATAAAGCCGGTTTGCAAAATTCATGGATGAATTTTCATTGTCATAATGGT AATTTGAATGAACAAACGCAAAATTTAGCAACCAACCCACATGGAGGCTTTAACCTTAAGGCCAATAACATTACT TGGGATAAAGGCTCTGTGAATGGAGGGGGAATTTTGCGTGGATAACGCCGATAGCAATGGCGCAACCCACCATTA GCGGAGTAACCTTCAATAATAACGGCACCTTTGATTTATAAGGGGGTGAAATAAGCGCGGAAATTTCTTAAACCCCTAG AAAACAACACATTTCAATTCCTACAATATCAACGCAAAAGCGCAAAACCTAATTTTAAACAACAACCTCGTTTAAATGGCGG TAGCTATTCTGTTAATGACACTAAAAACACCCACTTTAAAGGCACAAACACGCTCATTAACAGCGATCCTTTTAGCCG CCTTAAAGGATCAGTTTCTATTGAAAATAATAGTGTTTTAAATAATTGAAGGGGATTGACCGGATAAAACCACTTACACG CITTTAAGCGGAAATAGTATCAATAACAATAACCAAGCTTTAGCGGGACAAATGCTTTTCAAATAATTTATGGAATTA ATCCATTATGGTGCGGAACAAAGGGACTCTATTAGAGCGGATAACAACACCTTTTTTTGTGCAATTCACCCCAAGCAAC GGCCAAA	3072	GKTSGAEWGLVGYIQGVFKANQIDITG TIRSGNAKTGGGATLVFNAQKRLNIA NAHLNNDKAGLQNSWMFVNNGNLN VTNAKFSNQTPHGGFNLIKANNITWDK GSVNGGNGFVGNADSNAGATTISGVT FNNNGTLIYKGGENSAGHSLTLENNTF NSYNINAKAQNLIFFNNNSFNGGSYSFN DTKNTTFKGTNTLINSDF:SRLLKGSVSI ENNSVFNIERDLTDKTTYLLSGNSIKY NNQALAGQCFFKKFMEFNPLWWRTTR DSIKSG

HP0371	3073	TACGAATTTAATCAAGCCACGCTCAATTTAAGGCTAAAAATATCCATATCAATTTCCAAGGCGTTTCTACTTTTAAACAAACTCTACGATGAATTTAGCTGAAAGTTCCCAAGCGAGCTTTAAGCTCTTAAGTGGAAGGGAACGAAATTTCAATCTCAATAACTCAAGCTTTGTTGAATTTCAATGGAATAGCGTTTCAAGCTCCTGTGAGTTTATGCTAATCATCTCAAAATTTCTTCACTAAATTAGCGACTTTAATCTGACGCTCTTTGATTTAAGCAACACAGCACCTGAAATTTTCAAAGCGCTCTTTAATGCTCTAAACCTTTTAGGCAATGGCAGTAACAATCTAGCGATCAACGCTAAAGGGAATTTTAGTTTGGGCTAAAGGATTTTGAATCTGCTTATATGAATCTAATTTGGGGGATAAAAAATCTCCGTTTATGATGCTTGAAGCCCAAAATATTGATGGCTAATGGGAATAACGGCTATGAGAAGATCCGTTTATGGCATACA GATTGACAAGGCTGATTACTCGTTTGATAACGGCGTTC	3074	TNFNQATLNLRAKNIHINHQGVSTFKQ NSTMNLAESSQASFNALKVEGETNFNL NNSSLLNFNGNSVFNAPVSFYANHQSQI SFTKLATFNSDASFDLSNNSTLNFQSV LLNGALNLLNGSNSNLAINAKGNFSFG SKGILNLSYMNLFGGDKKTSVYDVLQA QNIDGLMGNGYEKIRFYGIQIDKADY SFDNGV
HP0371	3075	GATCAATTTACGCGATATCAGGGTAAGCTTTCTAAGATTTTCTAACATTTCTAGATACCTTAAACGCTACTAACGGATTAAACGCTTAATGCTCTCTAAATGACATTAGCGTTCAAAAAGGTCAGATTTGCGTGAATGTTTTAAATTCGATGGCGGAGAAAAAGCTCATTTCAAGCGCGACAGCCCAACCAATGAACACTAGAACGGAATCGGAATAATTCGCTTTTAGTGCAATTAAGGCTAATGGATTAGTGATTTTCAAAAGTTTACAAAATACTACGATCGGGACTTTAGATTTAGGCCAAACGCTACTTTTAAAGCGAATCATTTGATCGTGAATAACGCTTTTAAACAATACTAATTACAGGCTGATATTAGCGGTAATCTCAATGTGGTTAAAGGAGCGGCTCTCAGCACGAATGAAATGGTTTGAATGTGGGGCGGATTTCAAGAGCGAAGGTCATTAATCTTTAATCTTAACAATAAACCAATCAACGATTATTAATGTGGCTGCAATCTACGATCATGCTTATGTTATGACATCAATCAATCATTTAATCCATTTAATACCAACTCAAGCAAGGCGCTTACACGCTTTAATATGCGAAACGCGATGCTTTAAGGCAACGCGATGCAATTAACGCGGATTTCACTAAGCTATGACAACCAACCGGTCATATTAAAGATGGGGCTTTGTGTAAGCTTTAAGACAAATCAGGGGCAATGGTGTATTCATCTATCCTTTATGATAAAGTTCAAGTTAGCGTCTGATAAGCCCATGGATATTCATGCCCTAGTTTGGAGTATTACATTAATACATTCGAAGCAGTGCTGGTTGGATGCGATCAATCTGCAGGCAATAATCCATCTGTGGTTGAATGAGCTTTTGTGGCTAAAGG GGGTAAT	3076	INFTYQGGKLSFISKDFSNISLDTLNAT NGLTLNAPKNDISVQKGQICVNLNCM GEKKAHSSSATAPTNETLEANANNFAF LGAIKANGLVDFSKVLQNTTIGTLDLGP NATFKANHLVNAFNANNINSYRADISG NLNVVKGAAALSTNENGLNVGGDFKSE GSLIFLNKNTQTINVAGNSTIMSYN NQALHFNTQLKQGAAYTLINAKRMLYG YDNQIRGGSLSDYLKLYTLIDFNGKRM QLNGDSLSDYDNQVPVNIKDGGLVVSFK DNQGMVYSSILYDKVQVSVSDKPMQ IHAPSLEYIKYIQGSAGLDAIKSAGNN SILWNLSELFVAKGGNPLFAPYYLQDNP TEHVTLMKDITSALGMLSKPNLKNNST DALQLNTYTQMSRLAKLSNFASFST DFSERLSSLNQRFADAIPNAMDVILKY SQRDKLKNLWATGVGVSFVENGT GTLYGVNVGYDRFIKGVIVGGYAAAYGY SGFYER
HP0371	3077	GCTTGGCAGTAAGGTTTGAATACGATGTGATTGACAAGCTTAAGGACGCTGATGAAAAGGCGTTAATCGCCCCCTTAGACAAAGAAAATGGAGCAAAATGTTGAAAACAAAAGCCCTTGTAGAAATTAAGCGCTCTTTCAGCTCTAAAGGCCCGTTAAACCGCTTCAGATTATCCACTTATATCAGCCGAAAAGCAATGTTACAGGCGATGCGTTGAGTGCGAGCGTGGGGTTCGCTATTAAGATATTAAGTGATGTGCAAAATTTAGCGCAAGCGGATATTAACGAAATGGGGCGAAATTTCTCAAGAGACGATATTTTAGCCAAAGTGATACACGCTCAAGTTTACACACAAAACAAAGA CTACGCCGTTAATTAAGCAGGAATGACTTTAGCGGATGTGGCTCAAGCATCACGACGCTACCAATGGCGAAGTGATGGGTATTGTATGAAAACAGGAGGGAATGACCCCTACCAATTAATGGTGAATACCAAAACACCGCGGAAGAC AACCGAGTCTATTTGGCTCACACCTCCAATCCACGCTCACTAAACAAAACGCCCTTCTTTGGGGTTGATGGGAGCGGAAAAGTGAAGTGTGTTGAATTTAAGGGGCTGATGGGAACATGCATGAAGTCCCATCATGCTAGAACTCC CTGAAAGCGCTCTATCAACAAAACACCGCAATCCAAAAGCGATGGAGCAGGCTTTAGAAAATGACCCCTAATTTTAAAATTTGATCGCTAATGGGATATTTCCATAGACACTCTTCATGGAGGGGAATCTTTAATCATTATGACAGGCGTGGGGAAACATTGAAGTTAAAGGGAGTAAGGCTAAAGGCTTGGGTTTACAAACCAACCCCAAGAAAGCG ATTTATAAAAGGCTCTCGCACGATAAAAGAGGGTAAATTAAGAGGGGTGCTAGTTGAATGGCCAAAACCTGGATT TGAAGTCTTAAACCAAGAG	3078	LGSKVLNYDVIDKLKDADEKALIAPLDK KMEQNVKQKALVEIKTLLSALKGPVK TLSDYSTYISRKSNTVTDALSASVGVG VPIQDIKVDVQNLAQGDINELGAKFSSR DDIFSQVDTTLKFYTNKDYAVNIKAG MTLGDVAQSITDATNGEVMGVMKGTG GNDPYQLMVNTKNTGEDNRVYFGSHL QSTLTNKNALSGLVDGSGKSEVSLNLK GADGNMHEVPIMLELPESASIKQKNTAI QKAMEQALENDPNFKNLNANGDISIDL HGGESLIINDRRGGNIEVKGSKAKELG FLQTTTQESDLLKSSRTIKEGKLEGVVS LNGQKLDLSALTKESTSEENTDAIIQ
HP0371	3079	CCTTTCGCCCTTACAAATCCCCCAAGATTGACTTACCAGCCCGTCTTAGCACGAAAGTGAATATTAGCGTGAATTTAAACCCCTAAAGACCATTTAAAGCGGTGCAAGATTTTCTTAAACGATAAGGGCGAGATTATTAAGGAGCGGTTTTTAAACCCAGGACATTAAAGCTTTAGCGGAATAACGATAACGAGGCCCATAGATGCGATCACTAATCGCAAATTAACATCAGTAT	3080	LSPLQIPQDLTYQPVLSTKVNISVNLNP KDHLKGVQDFFLNDKGEIKERFLNQDI NALANNNDNEPIDAITNRKLNIS

HP1122	3081	ATGAATTATAAAATTTAGATTATTTGTGGGCTGGGGTTTAGCGCTGGGTAGAGTGTTTAGAAAGAGTTTGAC GCTTTAATAGGGCTAGATTGCGATAAACAAAGCCCTAATCACATTTTGAACCAACCATATAAAACGCCATAGCGGTTTGT GGGACATCACTCAAAACCGAAATTAAGAAAGTCACTCAAACTAGCTAAATAATTAGAAATCAACATGATCATTTGGC GGGCTCCATGTCAAGGCTTTCTAATAAAGGAAATTTAGGGCTAAAGACCCCTAGGAATTTTTTATTCTTAGAA TATATAGAAATAGTCAAGGCCATAAAGCCAGAAATTTTATCATTTGAAACGTGAAACCTCATCTCTGGCTAAAG GCTATTTTGAAGAAATTAAGAAAGGTTGAACGCTTAGGGTATCAATTGAGCTATCAATCTCTAAACGCTAAAGA TTATGGCGTGCCTCAAAACAGAGAGAGAGCCCTTTATTGTAGGGCTAGCTGTTTCAGTTTGATTTCAATCTTTTAGA GCCTTCTCAAGCGTGAATGTTCAAGATGCCATAAGCGATTAGCCTATCTTTGTTCTAATGAGGGCGGCTTTGAGA GCGATTATTTAAACCTATCCATCAAGCTATCAAGCTTTAATCGAAAGATAGCCCTAAATTATACAACCATCAAGC CACCAACCATCGCAAGCGCTTTAGAGAAATTAACCTATTAAACAAAGAAAGCAAGCAAGAAATGCTTGCCTAAAA CTTGATGGCAACAGCAATTAAGGCGCTGAAATGGAATAAATCAGCCCAACCATAGACACAC GATTTGACACTCCAGCAATGGCACCAACTCCACCCGAAATGACCGCTCTATCACGCTAGAGAAGCCGCTAG GATACAAAGTTTAGCGATAATTATATCTTTATGCAATAAAACGAGCGTTTGTAAAGCAAAATCGGTAAACGCTGTGCC TCTCTCTCTAG	3082	IMNYKILDFCGAGGFSAGLECEEFDA LIGLDCDKQALITFENNHNKNAIGVCDDI TQTEIKEKVIKAKKLEINMIIGPPCQG FSNKGKNLGLKDPNRF_FLEYIEIVKAIK PEIFIENVNKLISCAGYFLEEIKERLNA LGQLSYQILNAKDYGVQPNRERAFIV GASRFSFDNLLPSQSVNVQDAISDL AYLCSNEGAFESDYLNIPIQSSYQALMR KDSPLYNHQATNHSCTAALEKLINK EQGKECLPNLHGKQCFKSTWGRNL WNKISPTIDTRFDTPSNGTNSHPHHR SITPREAARIQSFSQNYIFYGNKTSVCK QIGNAVPPLL
HP1122	3083	AACGAACAAGACCCCAATAAAATCGCCTTAGAATTTATGAAGTTTGAGCAAGTTTGAAGCGGATGTGCGGACCC CACTAGCGAAGCGCCGACCAACCAACACCGCTCAGCTCATGTATATTGGCAGCACGCCGGATAATATTGAG GGATTTTACAGCTATAAGGAAATGGCGTGTGTCCAAATACGGGAGGATGGCTGGGATTTTCTTTGGT GCGCTATTGGGAGTTATATTGATGGGCATAAAATCGAGCGCTGCCAGTCCCTTTTTTAAAAATCGCTAACG ATGTGGCGATTGCGGTGATCAATTAGGCACACGAAAGGCGGATTCGGGTGATTGGAAATTTGGCACATTGA TGTGATGGAGTTGATTAAAGGAAATAGCGCGGATGAAAGCGCAAGCGCATGATTTATCCCGGCTCTTT GGGTGCGGATTTGTTTTGAAAGGTTTTAGAGAAATAGCGCGGATGAAAGCGGATTTATGACCTTATGAGTGAAGGATT TGACTGAGCTTTATGGCAGGATTTGAAAGGTTTTAGAGATGCGATGTGACTTTATTTGACCTTATGAGTGAAGGATA TTAACGCTAAGATTATGGCAAGGATTTGAAAGGTTTTAGAGATGCGATGTGACTTTATTTGAGCGGTTGCTTTCTAGCCTTTAAAGATAA CGCCAATCGGTGCAACCGCTCATGAGGAATCATTCGATCCAGCAATCTATGCACGGAGATTTTCCAAAAATA CCGCGCTTAACCACTACTACATGCAATAGAAATACACCGGACCATATA	3084	NEQEPNKIALEFYEVLSKFAMCATPT LANARTTKHQLSSCYIGSTPDNIEGIFD SYKEMALLSKYGGIGWDFSLVRSIGS YIDGHKNASAGTIPFLKIANDVAIAVDQL GTRKGAAVYLEIWHIDVMEFIDLRKNS GDERRRAHDLFPALWYCDLFLKRVLE DAMWTLFDPYECKDLTELYGQDFEKR YLEYEKDPKIKEYINAKDLWKKLMNYF EAGLPFLAFKDNANRCPNAHAGIIRS SNLCTEIFQNTAPNHYYMQIETDGTI
HP1122	3085	GCCGAGCGTGGAAAGAAACACCTTATTGAACAAAAAGGCTTTTTCATCCCGCCAAAGCGCTTTATTTGTAATGCGCTA AAAAACGCGTGCCATAACGAAGATCTCAATGTAACTTACAAATATTTTACGAATAGAAAAATCTAGCCTTGGC ACTCCATCAGAAAGAAATGTCAAAGGCTTTTTCGGATTAGATGTCAATAGCAATAATTAGGGAGCTCTCATCAA AATAGGGTGAAAAATTGACTAAATCCTTGAAGCCATAGGGGCGATGCAATTAGCGGATTTATTTAAAAAGCGGAT TGATGTTTTGGCGACGCTTATGAATATTTAATGGCCATGTATCGGACCAACGCCGCAAAAGCGGAGGGAATTTT TCACCCCCAAGAGTGAGCGAACTGCTCGTAAATCACCCCTACACGGCCAAAGAGAGCGTCAATAAGTTTATGAC CCATGCTGTGGAGTGGAGCTTACTCTTACAAATTTCTAAAGTTAGGCGATAAAATGTCTCAAAAGGGTATTTT GGCAAGAAATCAATTTGACCACCTTACAACTTTGCCGTATCAACATGTTTTGTCATGACATCAATTA	3086	AERGRKHLEQKGFIPPSALFCNALKN ACHNEDLNVTLQINIFNEIEKSSSLGTPSE ENVKGLFADLDVNSNKLGSSEQNRVE KLTKILEAIGGMQLGDY/LKSGIDVFGDA YEYLMAMYASNAGKSGGEFFTPQEV ELLAKITLHGQESVKNKYDPCCGSGSL LLOFSKVLGDKNVSKGYFGQEIINTTY NLCRINMFLHDIN
HP1122	3087	AAAGCGCTGAATCAAATGAGCGAAAGAGAGCAATCCTTATCCAGCTTTATTACTTTGAAGAGTTGAATTTGAGCGGAG ATTAAAGAGATTTAGGCATTACTGAATCGCGCATTTCTCAAATCATTAAGAAGTGATTAAGAAAGTGCGTAAATCCT TAGGAGTGGATCA	3088	KALNQMSEREQILQLYYFEELNLSEIK EILGITESRISQIIEKVIKVRKSLGVD
HP1122	3089	AAACGCTTGCTAACGATAGATTAGCCAGAAATGAACGATATTTAATGCTCTCCTTACTGGATGGCTATATC CAAAACGAAATAAGCGTTTAGCCCCCTTTAGCGCGCTTGAAGAAAAATTCACCCGATTAGAGAAAGCTAGAAAA AGAAAGCGGATTGTTAGAGGATAAAAGCGTTTCCAAAAGGATTAGAGAACGATTGAATTTGAAAAAATGAAAT AGAGAGCGTGGATTTAAAGAAAGATGAATACGAACGCTTTTAGAGCAAAAAAATGCTTTCTAGTAAGGAAAACT GAACGATAAAATCGCTCTGGCGTTAGAGGTGCTAGAAAAATACCCATAAAATCACGCTGCTTTAGAGAGCGGTGGCC ATAGCGCGGAGTTTTTAAAAAGCGCTTTATAGAAAGCGGCTCTATTGGAAAAAGAGCAGGCTAAATTAGA	3090	KRLSNDRFSQNEINDILMSLLDGYIQ NENKAFSPILLGALEEKFTREKLEKER RLLEDKKRFQKDLERLNFKEKMLERL DLKEDEYERLLEQKLLSSKEKLNKIA LALEVLNTHKITHALE:SVGHSAEFLKS ALLEASALLEKEQAKL

HP0634	3091	CCGCTTGGATCCCTGCTGGTTCCTTTATCCAACACTGGGTGATGATCATAGAGCGTTTAGTTGGCAATCT AAGGATTTAAACCCCTTGGAATTCAGCGTGATGATGGAATGGAATGTTGAAACGAGGAAAAAATCGCTC GTTTTAAACAGGCAAGCAAGACATAGCCATAGCTTAAAGACGCTCCAAAGTTGGGCTCTCTCAAGGGA TATTTTATTTAAAGAGAGAGAAATATCGCCGTTAATATCTTGAATCTGAAGTCATTCACATCAAGCCAAAGAGC GTGGCAGAGTAGCGAAATATGCTATGAATAGGAACCGCCATGCGGCTTTACTATGCGGAGTCTCAATTTGA ATTTAAACACCAATTTGAAAGCCACGCTAGGTTATTAGAAAGCTAGGGTTCAAAATCGTGTAAAGTTCAAA ATTGGATTTCAAAGACGCTTAACCGTGAGCATGCCCATAGTGAGCCTAATTTAAGTCTCAGTAGCGAGCGATT TTAAAGTGGTCGTAAATAGAAAGAAATAGAAATACAAATGGAATAAGGAAAGCGTGAAAGCACTGAAAAA AGCGTGGGTATGCCCCCAAAACTCCAAGACAGACAACGCTCATGTGGATAACGAATTTCTGATTCTGCAAGT CAATGAT	3092	AWIPAWLLFIQHWV
HP0634	3093	TCATTGATGGCAAAAGAGCGCTCTATGGCGGATTCGCTGCGGAATTTGTCATAAAATTCAGGGATCAGC ATAGATATTGGAGGGGTAGCACCGAGTGCGGTTGATTGAAAGGCAAGATTAGGACTTAATCTCGCTTGATGT TGGACGATTGCAATTAAGAAATGTTTTAGACAAAGACTTAGAGTCAATTTGGCTAAAGCCTTTATCCAAAAAGA AGTCTCTAAAGTGGCTTTAAACACAAAGCGCTTTGGGTGGGACGATCAGAGCGTTGAGTAAGGTATTG ATGAAACGCTTTTGTACCTATTGATTCCTTGCATGGCTATGAATAGATGCACATAAAATTTAGCGTTCAATTGAAA AAATCGTCATGCTCAAGAGATCAATTAACGGCTTTTAAAGGTTGAATGAAGAGCGTTGGATAGCATCAGGAGCGGG GCGTTGATTTATCAGTCGTTTGGAGCATTTAAAGCTTTTAAAGCTTTGATGATCAGTAGTGGGTGGGTGAGAGAGG CGTGTTTTGGAGCGATTATTGGCGCATCATTAACATAAATCCCGCCCAATCAACCCCTCTCTCATCTCTTAAAG GATCGCTTTTGGCCCATGAAAGCACAGCCAAAGGTCAAAAGAAATGCGTGAATTTGTTGAAGCCTTATCGCC TTTGCAATAAATAGATGAAAAATACCTTTCCATTTAAAGATTGCGGGGGAATTAGCGAGCATGGTAAGATTTTAAG CGTCTATTAGCCCAAGCACAGCGCGTATTTATTT	3094	IDGQKEALYGGIACANLLHKNSGITIDIG GGSTECALIEKGKIKDLISLDVGTIRIKE MFLDKDLEVKLAKAFIQKEVSKLPFKHK NAFGVGGTIRALSKVLMKRFYCYPIDSL HGYEIDAHKNLAFIEKIVMLKEDQLRLL GVNEERLDSIRSGALILSWLEHLKTSL MITSGVGVREGVFLSDLLRHHYHKFPP NINPSLISLKDRFLPHEKHSQKVKECV KLFEALSPHKKIDEKYLFLHLKIAGELAS MGKILSVYLAHKHSAYFI
HP0634	3095	CCTTTTCACGCATTCTGGCAAAATTTCTATCAAAACGCGCCCTATAAATTGGATAATACCCCTATTGAAGAAAAATTGC GCATGTTATGCTTGCAACGCTATTCTAAAGCCTATTGACCAATTTATTTAGGGCTAAAGAACTCACTTACGCTCGTT TGGCCAGCTTGCACAATTTGCATTTTATTTAGAGCTGGTGAAGAACGCCAATTTAGAAAAAGCGGTTTT TGAGTTTAAAGAAATTTTGGAGAAATACAACTCCCGCTCTCATTTGAATGATGGAATGCAAAATACTAAAGC GTTTTTACCATCAATAAAGTTTCTTAAACGCTATGGAACCAAAATACTTTTAAATTTTGAATTAACAAACCCCTATCTTTGA TAAATCTCAGGGTGGGTGCTTTTAAACGCTATGGAACCAAAATACTTTTGGCGTTATCGGTGATTGAGAGCGGATACCTCG CACAAACTCGCTTGGGTGCTTCAATATCGTTTAAATATCGTTTAAATCAATGAATACCGGCTGAATATCTATATAACGGCG ATAATAGGTCGCTGATAATGCGAATAATCGTCAATTAATCAATGAATACCGGCTGAATATCTATATAACGGCG CGACAAATAGAGCGATCGTGTGCGTAGCGTCTATCAAGAAATTTCAACCAACCCCATCTTTAGGCACGA CATTTTGATCCACTAAATCCCACAGACCATTTGCCCTGATTATACATTTAATGAGTTCTTTCATCGCCCTATTTT ATTGACAAACGCAACCCCAACGCTCTCGCCTACTCATATCATGTGATTGATGGGCAAAATTTAGTCAACGCC CCAAACACGCCCTACCATAAATTTTCATAAATATTGCGCTAAAGTCGTGCTACCGCTTCCCAATAGCCAAATGCATGC ATAAAGTGATCGCTTGGCCTTCCCTTGTGTTTAAAGATTCCACACATTTTCTTTCATTGATGAGCGTGAAACGAGCGTCTCGT ATTCATC	3096	LFTHSGKISIKNAPYKLDNTPIEENCAC YACKRYSKAYLHHLFRAKELTYARLAS LHNLHFYLELVKNARNAILEKRFLSFKK EFLEKYNRSRSH

HP0634	3097	AAACAAGCACTTAGACACCACGATGGTGAGCGAGTTTGTGGGAAACCTAGGGCGTTTATTAAAGATCCAAAGAGCG TGTAATTTGATTGCAATTATTCATTATCCCAAGCGTGAGAGGGAGGCTAGGAGTTTGAAGAGAGAGAAAAATTTTA GAGCAAGTGGGCTTTATGCTCTAAAGGGGTTCAAGAAGTGTTTAAACCGCACCAATGTGGGAGCTATGGGA AAGATAGAGGAAGCAATATCGCGGATGATTAAAGAAATTAAGCCAGATCGCTGATTAAACCGCATAGGATGGG AGCTTAGAACCTAATCAAAATTAAGGATGAATTTTAGAGCTTTTAGAGAGGATTTTAGAAAAACATTTGCATATCG CTTACAGCACAGCCATGATCTCATGCTAGAGAGGATGAATCGAAGAACCGCACTAAAGCGATAGGAAATTTATTA GAAACAATCGCTTCTAAGAATTTGCTATTGGCAGGATTTATTGTGGGCATCCGCGGAGAGCGGAAAGCGTTTT TGAAAAAGCGTTTAAAAATTTAGAAAGCTTGCTTTAACGCACATCCACCTTTATTACAGCAACGAAAGACAC CCCTCTAGCTTGATGACTGATAGCGTGAGTTTGAAGATTCTAAAGCGTTTGAATGCGATTAAAGATTTGATTTT TCATAAAATAAGCGTTTCAGGCAATTGCAGCTCAAGCTCAATACGCTCTAAAGCGCTTAGTGGAAAGTGCAAAAAG ACGGCGAATTTAAAGCCTTAGATCAATTTTCAACCCCATTAATAAAGCGATAGCCCTCTAAGGGCTAGTTTTTT AGAAATCAAGAGATGAATTAAGGAGAGGAAATCATGCCGTTTTCTAAAAATTTAGAAAAATCTTACCGCTCCCT TCAACGCAATAAAAACCGCTCGCTGTTTGGCGTTAGGG	3098	NKHLDTTMVSEFVGKTRAFIKIQEGCD FDCNYCIIPSVRGRARSFEE:RKILEQVG LLCSKGVQEVLTGTNVGSYGKDRGS NIARLIKLSQIAGLKRIRIGSLEPNQIND EFLELEEDFLEKHLHIALQSHDLMLE RMNRRNRTKSDRELLETIASKNFAIGT DFIVGHPGESGSVFEKAFKINLESPLT HIHPFYSKRKDTPSSLMTD SVSLEDK KRLNAIKDLIFHKNAKAFRQLQLKNTPL KALVEVQKDGFEKALDQFFNPIKISDK PLRASFLIKEYEIKERENHAFV
HP0634	3099	GCCCTATATCGCTAGAAATATCCTTTGGAAAAATCCGTCTCAAAGAACCGCATGAAGCCCTTTTTGGGGGGTTA AAGCGGATGAGATCTTAAAGAAATCGTTTTTATAGCCGCTAAATTAATAATCCCTTTTTTGTTGTGAATGGGTA TGACCAAGTTGAAAAGCTTGAAAGAAATGCTTGGAATTTTGGGTTATGATGAGAGTTTTACAAGG	3100	PYIARNYPLEKSVLKEPHEALFGGVKG DEILKEIVFLAAKLKIPFLVCEMGYDQLK SLKECLEFCGYDAEFYK
HP0634	3101	ATGCGGGCGATATTGAGCGATTGCCGGTTTAAATGCAATGGATGTGGCGGATAGCGTCTGATCCTGCTAAACCC CATGCCCTTAGATCCCATGCAATTTAGAAAGCCCTACGATGAGCGTGATTTGCTGTCAATGATCACCTTAGCCCG GTTAGAAAGGAAGCATGTTACTGCTAATAAATTGAAGACAGGCTCTTAAAGAAATGCAACCAATATCGCTATGAA ATGCGAAGAAATGGCGAGGGCAAGTTTAAAGTGAGTGGCGTGGGAATTGCAAAATCACTATTTTAGCTGAAAACT TGCGCCGTGAAGGTTTGAATTTAGCAATTCACGCCCT	3102	AGDIVAAGFNAMDVGDVSDPANPM PLDPMHLEPTMSVYFAVNDSPLAGLE GKHVTANKLKDRLKEMQTNIAMKCEE MGEKFKVSGRGELOQITLAENLRREG FEFSISRP
HP0634	3103	ATATCCAAAAACCAAGCTGATAGAATCTATCGCCAAAGCGTTTAAATGAGAGCCATGTGAGTCTGAGGTAATCAAT TTGAAAGCAAAAGGTATGACCCACAACCAACAGGATCATCAGAGCAATCAAGCACCTTAAAAATCAGAGACTAC GCTAACGCTTTACAAAAGAAATCAACGCGCTTTGCTTGACCTTGCCAAAGATGAGCGCTTACCTTAAATTCACG CTTGAACTCTACACGCTTTAAACAAAGAGCATTTACAAACTCACCCAAAGCCCTTAAATGCTTAAAGGCATCA TTAAAGATAAGTTGCATGAA	3104	IQKTKLIESIAKAFNESHVSAEVIKFEK RYDPQTNRIITEQSSTLKIRDYANALQK EINALLDFAKDERLPLKFTLELYNALN KEHFTNSPKKAFKLLKGIKDKLHE
HP0634	3105	AAGCGCTTTTAAAGCCCAATCAAAATGACATTACCGGCACGATTGCTCTGTAATGGGCAAAACCGGTGGGG CGCGACTTTAGTGTAAACGCTCAAAAGCGTTTGAATATCGCTAACGCTCATTTGAATAACGATAAAGCCGTTTGCA AAATTCATGGATGAATTCATTGTCAATAATGGTAATTTGAATGTAACAAACGCAAAATTTAGCAACCAACCCACAT GGAGGCTTTAACCTTAAGGCCAATAACATTACTTGGGATAAAGGCTCTGTAATGAGGGGGAAATTTGGCGTGG ATAACGCCGATAGCAATGGCGCAACCACTTACCGGAGTAACCTTCAATAACGGCCTTTGATTATAAAGGG GGTGAAATAGCGCGGAAATCTTTAACCTAGAAACACACTTCAATTCCTACAATATCAACGCAAAAGCGCAA AACCTAATTTTAAACAACACTCGTTTAAATGGCGGTAGCTATTCTGTTAATGACACTAAACACCACTTTAAAGGCA CAAACACGCTCATTAACAGCGATCCTTTTAGCCGCTTAAAGGATCAGTTTCTATTGAAAAATATAGTGTTTTAAATAT TGAAAGGGATTGACCGATAAAACCACTTACACGCTTTTAAAGCGGAAATAGTATCAAAATACATAACCAAGCTTTAGC GGGACAATGCTTTTCAAAAAATTTATGGAATTTAATCCATTATGTTGGCGAACAAGGACTCTATTAAAGAGCGGATA ACAACACCTTTTGTGCAATTCACCCAAAGCAACGGCCAAAAATTTGTTTGAAGAACTTTAATCCGGGCTCTAT CACCTATAAATATTTCACTATCCATTCTCGCTTTCCACACAGACGCTGATTCTAAGGATATTGGAGTCAAGTGAG GAAGCAATTTGATTTCATCCAGGAAACCCCTGTGTGTGGCGTGTGCTATATCGCGCTTATAAAAAATCAAGA CCTTATTGGCT	3106	GVFKANQIDITGIRSGNGAICTGGGAT LVFNAQKRLNIANAHLNNDKAGLQNS WMNFVNNGLNVTNAKFSNQTPHGG FNLKANNTWDKGVSNGGNGFVDNA DSNGATTISGVTNNNGTLYKGGENS AGNSLTENNTFNSYNINAKAQNLFNN NSFNGGSYSFNDTKNTTFK3TNTLNS DPFSRLKGSVSIENNSVFNIE:RDLTDKT TYTLLSGNSIKYNNOALAGOCFFKFM EFNPLWWRTDSIKSG

HP0634	3107	ATCATTTTAAAGACGCTCTCACTAAAGTAAGCTACCCACAGCAACGCGCAACCTTTTATTCTAGGGATTAATG AAATCTTGCGCAAAAACCTCTAAAGCGCTCAAGTATTTGAACGATCAGAAGCGGTGTCAAGACGATGATTTT CAAAAGACAGAGCGATTTTGGCAGTATTTAGTTCTAAAGAAAAAATTTAGAACGCTTTACAAAGCCCGAG CTTTAAATCTCTATAGCTTTATGCGAGCGCAAACTCAAAACCCAGCCAGTTACCGCATCATTTTACGCGATCCAGA ATTTAAGCCAAAGATCCTCTCTTTAACACTTATGACCCCTTTTCGTGGCAAAATTTTAAAGGAAAAAACCTTGAGTTT GAAAGATGAGGCGCGTTTAAATGCGATGCTAAAAAGCCTGTATTATGAAAAAGCGCTCCTGAATTGACCTATCTTTT AAGCC	3108	HFKDALTAKSNATHSNAQTFFILGINEILR KKPSKALKYFERSEAVVKDDDFSKDRA IFWQYLVSKKKKTLERLSQSPALNLYSL YASRKLKTTTPSYRIISRIQNLSQEDPPF NTYDPFSWQIFKEKTLISLKDEGAFNAM LKSLYYEKSAPELTYLLS
HP0634	3109	ATGAAGTTCAAGAAATGAAGCTCAAAAAGAAACCCCAATCCAATCAAAACGCTAAAGAAATGAAAGTCAAGTCCA TTTCTTATGTCGGGCTTTCTTACATGCTGACATGCTCGCTAATGAAATGTAAGATTCGTGTGGCGATATTGTGG ATTCTAAATAAGACACCGCTGTTTGGCTTTGTTCAATCAAGGATTTTAAAGACGTTTATGCCACITTTGAAGG CGGCATATTAGAGTTTCAATTTGATGAAAAAGCCAGGATTCGCGGGTAGAAATCAAGGTTATGGGACTGAAAAGG AAAAAGACGCTTAAATCCCAATGGGATCAAAAAGGCGACACCTTTGATGAGCAAAAATTAGAGCATGCTAAA ACGGCTTTAAAAACCGCTTTAGAGGGGCGAGGCTATTATGGAGCGTGGTGAGGACAGCAAAAGGTCAGT GAGGTCATTATTGATCGTTTGAATGATGTAAGGCGGATGATTTATCAACAATCCATTATGAGGGAAG CGCGAAATTAAACCGCGCATGATTGAATCTTTGAGTGGCAACAGCAACGAGATTTATGCGTATCCAGATGTGTATGCGTAGGGT TTGAATGACGGGAAATTGCGTTAGATCAACTAGATACGATCTATGCGTATCCAGATGTGTATGCGTAGGGT TACTTAGACGCTCATATTTCTGCGCTTTTGAACGCGATTTTCTACCCATGACGCTAAGCTTCAATATAAGTCA AAGAGGGATCCAATACAGGATTTCAACATTTTAAAGAGATTGACAAACCGGTAGTCCCTTAAACACCTTAGAAA AAGCGCTTAAAGTGAAGGAAAGATGTCTTTAATATTAGCATTTAAGAGCGGATGCGCAAAATTTTAAACCCGAAA TCGCCGATAAGGGTTATGCGTTTGGGTGGTGAAGCCAGACTTGGATAAGATGAAAAAACGGCTTGTGAAAGT CATTTATCGTATTGAAGT	3110	EVQRNEAQKETPQSNQTPKEMVKSI SYVGLSYMDSMLANEIVKIRVGDVDSK KIDTAVLALFNQGYFKDVYATFEGGILE FHFDEKARIAGVEIKGYGTEKEKGLK SQMGIKKGDTFDEQKLEHAKTALTAL EGQGYGGSWEVRTEKVSEGAALLVFD VNRGDSYIKQSIYEGSAKLKRRMIESL SANKQRDFMGWMMWGLNDGKLRDQL EYDSMRIQDVYMRRGYLDHAISSPFLK TDFSTHDAKLHYKVKEGQYRISDILIEI DNPVPLKTLEKALKVKRKDVFNIEHLR ADAQILKTEIADKGYAFVAVKPDLDKDE KNGLVKVYRIEVEGDMVYINDVIISGNQ RTSDRIIRRELLGPKDKYNLTCLRNSE NSLRRLGFFSKVKEEKRVNSSLMDLL VSVEEGRGTQLQFLGLGYGSYGGLMLN GSVSENLFGTGQSMMSLYANIATGGG RSYPGMPKAGRMFAGNLSLTNPRIF DSWYSSTINLYADYRISYQYIQQGGGF GVNVGRMLGNRTHVSLGYNLNVTLL GFSSPLYN
HP0634	3111	TTGCCCATGTTGATAGCGAAATCTAGTAGTAAAGTAGTGGCGCAGCTACTACAAACGCCCTTCATGGCAACAG CCGGTGGCGGCAAAATTCATGTGCGACTTTTGGTGGGAGTTTAGTGGCGCTTACAGACATGATTAATAATGCGCAA AAATCGTTCAAGAAACCCCAACTCAGCGCCCAACCAAAATAATACACAAACCCCATATCTCAACCTTAAC ACCCCTAGCAGTCTTACGGCTTTAGCTCAAAAATGCTCAAAAATGCGCAATCTCAAGCAGAAATTTTAAACCTAGCC AATCAAGTGGAGCGGATTTTAAACAACTTTCTTCAAGCCATCTTAAAGACTACATAGGGAATGCGATGCGAGCGC TATAAGCAGTGGCAATATGACAAATGCAAAATCAAAAGAAACAAATGGGGAACGGGTGTGCTGGCTGGAAGAACT CTGTCTTCAATAAACAAGTGGCGCTGATTTTAAACAAACCAACCAATCAATCAAGCGCAAAACCTAGCCAAC ACCTTATTCAAGAACTTGGCAACAACCTTTTAGGAATATGGGCATGATCGCTTCTCAACCCAGCAATACCGCGC CTTGAATGCGCTTGGGTGCAAGTGGTTATAAGCAATTTTGGGAAAGAAAGATGGGGTTAAGGTATTATG GTTCTTTGATTACAACCGCTATATCAATCAATTTCTTAACTCGGCTTCTGATGTGAGCTTATGGGTG GCAGCGATTTATTGTTTAAATTCATCAATGATAAAACACCAACTTTTAGGCAAGATAACAGATTTCAGTGGGATT TTTTGAGGTATCGCCTT	3112	CPMLIAKSSSESSGAATTNAPSQTA GGGKNSCATFGAEFSAASDMINNAQKI VQETQQLSANQPKNITQPHNLNLTPS SLTALAQKMLKNAQSQAELKLANQVE SDFNKLSSGHLKDYIGKCDASAISAN MTMQNQNWNWNGCAGVEETLSSLK TSAADFNNQTPQINQAQNLANTLIQEL GNNPFRNMGMIASTTNGALNGLGV QVGKQFFGGEKKRWGLRYYGFFDYN HAYIKSNFFNSASDVWTVGVGSDLLFN FINDKNTNFLGKNNKISVGGFFGGIA

HP0634	3113	TGTGATCGCCAAAAAAGCTTTAGGGGTTTAGACATCAAAAGCTTATGCAGGCCATACGCCCTTTAACACCTATAA AGGCGATGGGCTTATCATTCACGCCCTTAGGCTGACCGCTTATAATTGAGTGCTCATGGCCGATTGTGCATG CTTTAAGCCAGAGCTATATTTAACGCCCTTGCGGATTTTCTTAACGCAACGCCCTTAGTGTAGGAGCGGAAT TTTGTTTGAATTTTGCCTCATGAAGACGCTCTTGTCGTCATTGATGGCAAGCCACCTATGATTTAAAGGCCAACCC AACCCCTATACATTCAAAAAGCCACGACCAAGCTCTTACAAAAATTCAGGGATTATTTAAAGTGCTTA AAGAAAAGCTCTATGGGGGAAAGCCCTAGCAAAAAAGATAAAAAGGTAACATGCGAGATTTCAATAACG CTCAATCACACGCTTAAAGTGCGTCAAAACGCTGTTTTGAAAAATTTGAGGCGTTTAAAGACGGCTTGAGCG CGATTAGTGGGCTAGCGGGTGGAAAAAGCGTTCTATTGCGAGTCTTTAGGGCGTTTGGCTTAAAGAGAG CAACGCTTCAACATGAAGTGAATTGATTGCGCTTTTACACACTGAAGAAATACGGCATTTTATAGAAAGATGA ACATGAACCTTAGTCATCAGCGTGATTAATAAGAAAAACGCGCTATTTTAAACCAACAAAGCCTGTCTAAAA CACGCTCAAGCGTTATTAAGGTTTGAATAACGCTTGCTAACGATAGATTCAGCCAGAAATGAACCTCAACGATAT TTTAATGCTCTCTTACTGGATGCTATATCCAAACGAAATAAGCGTTTAGCCCTTTAGCGCGCTTGAAGA AAAAATCACCCGATTAGAGAAGCTAGAAAAAGAAAGCGGATTGTAGAGGATAAAAAAGCGTTTCCAAAAAGGATTAGA AGAACGATTGAATT	3114	VIKKKALGVLDIKAYAGH'IPFNTYKGD GLIATPLGSTAYNLSAHG'IVHALSQS YILTPLCDFSLTQRPLVLGAEFCLNFC HEDALWIDGQATYDLKANQPLYIQKS PTTTKLLQKNSRDYFKVL'EKLLWGES PSKKR
HP0634	3115	TCTCTAACCCCATTAATGGATTTGCCAGCCAAAAACAACCGGGGTGCAAAAAAGCCACCAACGATCCATC AAGGCATACAAACATCCAGCAAAATATCCCTTCTCAAGTATTAACCCCTCAATCCAAAGCGGCATGCAAGGGGTG ATGCAAGGTTTGGGCTTTAGCAGCACTTAGAAGCCCCCTTATTGTTTCTAAGCAAAATGTGTTGATTGGGGC TTTGAGCATTATTTATCCCTTTATATGGTGGGCAAGATTCACGATGGTGGCATTGCGGATTGATGCAAAAAGA TGCTAATGAAGTGATCGTTTGAAAAAGCTTTCCACTTTTCAAGAGCTTGAGCGGTGATTACGGCATGGTGTAAA CGCAGAAAGTGCTGAACTTTAGAAAGAGGTGGAAAAAGGCCATTATAGCATTTCCAAACGCTTTGAAAAATGCAAA AAGTGGGGCAATCGCTAGGTAGAAACCTTAGCGCTCAAGTGCTTATGATAAGGCCCATATCGCTAGCGTTAA GGCTAAAGACGTGTTAGAAAGTTTCGAGCTCTCGTTCAATTCATTTATCTAGCAAGGACGATTAGTGCCTTCAAG CAAAATTAGAGATCCGACGGAGAAAAATCTGCCGATCTGAGCTTTTGTTCCTCCAGCTCAATTCCTACCCCGT TTTAAAGACTTTAGAAATCAGATTCAATCTCTAAAGAAACACGAAATTACAGATCGCTAAATCTTGCCCCAAGTG AGTTTTTTGGCTCTTATATTAGAACCAAAACAATTCGGTGTGTTGAAGACATGATCCCTAGTTGTTGTGGCGGTG GCCGGCGCATGCCATTCTTCTCCACAGGGCGCATTCAAAAATACCAAGCGGAGCAAAATTAGCGGAGTTGCAAG TGAGTAGCGAACAATCCAGGCTAAAAAACAATGGAATTATTAGTAATAAGACTTATAAAGAGACGCGCTTCTTATTT GAAAGAATACAAAAGC	3116	LSNPIKMFASQKQPGVQKATNQIHQ GIONIQNIPSQVLTPIQIAGMQGMQ GFGALSSSTLEAPLLFSKQNVVIGALSIIY PLYMGGARFTMVRADLMQKDANEVY RLKKLSTFOELVSYYGMV'LNAEVAET LEEVEKGHYKHFNQNALKVQKVGQIAR VETLGAQVAYDKAHIASVI'AKDVLEVS QLSFNSILSSKDDLVPSSKLEIRTEKNL PDLFFFVSSSTLNSYPVLKTLENQIQISK ENTKLQIAKFLPQVSVFFGSYIMKQNNNS VFEDMIPSWFVGAVGRMPILSPTGRIQ KYQASKLAELQVSSSEQIQAKKNMELLV NKTYKETLSYLKEYKSLLSVELAKENL KLQEQAFLLQGLSTNAQVIDARNLSSIV VEQKSVAYKYVSVLANLMA'LSHDHIDLFY EFVY

HP0634	3117	CAACAGAGTGGCTTTGGAAGAAATTTAGCCCTAAACCATCGCTTTAAGCTTTAGCGGGATAAATCTTTAACA GTGCGCAAGCGGCAATTATTATGGGCAAAAGAACGGTTGAAGCGTTAAACACACCCCTTTATAGAGTTTAA AGGTGGGTAAATCACGCTCACCTTCTTTTTCAGCCTAAAGCATGATAAATCATCAAGAACGACATTACAATC CATGCGTTATTGAACCAACTAAAGACGCTTTATTGCAAAAGCCCTCAAACTCTACGCTCTTTTAAAGCCTTTAGAAT TGAATGTGAGCATAGCTCTAGCTTTCTAAATAGGGAATTTGTTGGTAGGGAATTAGAAATCCTTTGCGTGAAAA TCCAGCCCAAAACACCCGCTTTAAATAGTGAGAACTTTATTAAAGCTTTTCCAAAAGGCGTTATCGCAAGGA TTTCATGCGAATTCGTGCTTTGAAGCTTTAGCTTGAATGAAAGATTTTGAAGAAATCGCTCTGTTTGAAGA AATCTTAATAAGCTTAAATTCGCTATAATAAATTTCTTTAAACGCGCATATCCCCACAAAACGCTAGAGAA TGATAGAAAACGACAGAACATCAATTTAAAGGAACCTAAGAAATGAAAGAAATCAGCGATCTTATAGAATGCATTGCGT ATGAAAATAATTTGCTAAAGAGATGATTTCAAAAGTGATTCAGGCTGTTTGTAAATGCGCAAAATGAGTTAG ACCCCTAGCACGCTACTTGGTGTGAAGAAACAAAGCAGCTCCAGCTTATCCAGTTGGTAGAATTTTAGAAGAT GGTGATGAAAGATTGTTAACGACCTTCTAAATACATCAGCTGTCTAAAGCCAAAGAAATGGATCCAAGCGTTAA GATTAAGACGAAATGTCCTATAGCTTGAGTTGGAGAGCATGAAACAAAGGAGCGATCAACCGCTTTTAAAGATTT GCAATACCAAG	3118	NRVALEEILALKPSLLSFSADKFFNSAQ AGIMGQKERVEALKNHPLYRVLRVGKI TLTLFCSLKAWINHQEDITHALLNQTK DALLQKALKLYALLKPLELNVSIASSFS KIGNLFGRELESFCVKIQPKNTRALNSE KLYLKFQKGVARIISCFVCFEVSFLN EKDFEKIALVLEEILNKA
HP0634	3119	ATTAAAGGAGTTTTAATCATGGCAGATATTCAAAGGCGTGATTTTTAGGAATGAGCCTTGCTAGTTACAGCTATA GGGCTATAGCGAGTCTGGTAGCGATGAAAAGACCTGGGATCCGCTTCCAAGCGTTGTTTCAGCCGGTTTTACGA CCATAGATGTGGCAATATGCAAGAGGCGAGTTTTCCACCGTGAATGGCGTGGAAACCGGTCTATATCCTCAA GCGTTCTAAAAAGAGGCGTTAATGAAAAGCGCGATTTTAAAGTTGGCGAGAGCGTTTTTACCACAGCCATTCAAAT TTGCACGCAATTTAGGGTGATCCCACTTATCAAGATGAAGAAAAGGCTTTTTATGCCCATGCCATGGGGCGGCTT TCACTTCTGATGGCGTGAATATTGCGGCACTCCCTCCACGCGCTTTTATGATATCCGCTTTTAAATGAAAGGC ACTAAGATCACTTTTGGTGAAGCGGCGCTGAATACAAAGAAATGATGGCTAAAGCGTAAGGAGGTTAATGGCAG AGATAAAAAGCGAAAATTTAGGCGAATGGCTGGACATGCGCTTGGCACTAACAGCTTGTAAAGTGCTAATG ACAGAAATTGGATCCCTAAACATCAATTTTTTATGGCGATGGGCTGATTTTAAACCTTTTGGCGTGCTT GTGGTCTCAGGGATTTCTTGCTCATGTATTACAGCTGATGCGAAATGGCGTTTGATAGCGTGATTTTCAACCATC ATGCAAGAGTGCGTTATGGCTGCTTTGGCGCCACATGCTGCGCAGCGAGCATGATTTTGTGTCATCTTTA TATCCACATGTTTGTGGCATCTATTATGGCTTTACAAAAGGCTGCTGAGATGATTTGGATTAGCGGGATGATTT GTTTGTGCTTTAGCGCGAAGCCTTTAGCGGTATATGCTGCTTGGGGCAGATGAGTTATTGGCGCCGACGCG GTTATCACGAAATTTATTGG	3120	LRSFLIMADIQRDRDFLGMSLASVTAIGAI ASLVAMKKTWDPLPSVVSAGFTTIDVA NMQEQFSTVEWRGKPYILKRSKKE GFNEKRDVKVGSVFTTAIQICTHLGCI PTYQDEEKGFCLCPCHGGRFTSDGVNI AGTPPPRPFDIPPFKIEGKTITFGEAGA EYKMMMAKA
HP0830	3121	AAAAATGACCGGTTTAGAAGAGGTTTGCTTCTAAGCAGCAGCGGGACAGGGCTATGGAAAGCGGCGTATTTC TTGTGTCAAAAAGAGTTGCTTTTGTATGCGGCAAGTTTGGCGAAAGTTTGGCAAGATCGCTAAAGCCCATCT ATCAAGCCCATGAATTAATGCTATGAATGGGACACACAGCTCAAGTAGATAAATATTAAAGCGTTCTTAAAGCCAA CCTAACATTGATGCGTTTTCATTCAAGCATGCGAGTCTAGTGGGGTTACGACACCCCTGTGGAATAATCGCTCA AGCGATCAAGAAACTAACCCGAATGTTTTGTAATTGTAGATGCTATCACCGCTTAGGGTTGAGCCTTTAGAAAT AACGCGATGTTGATGCGCTCATTGGAGGGAGTCAAAAAGCGTTTATGCTGCTCCTGCGATGAGCCTAGTCGCAATTG AGCCAGAAATGCAATTGAGCGGTATAGAAAGCAAGCAATGTGGGCTTTATTCAATTTAAAGAGCGAATTGAAAACCAA AGGAATAACACCAAGCTACACCGCTCTATTATACACACTTTAGGGTTGCAACGCTATTTTGAATTTGGTGCAAAAT TTAGGGGGCTTTGAAGCGCTCTATAGAGA	3122	KMTGLEEVLLSSSGTGAMEASVISLC QKELLFVNAGKFGFERFGKIAKAHSIKA HELVYEWDTPAQVDEILSVLKANPNID AFCIQACESSGGLRHPVEKIAQAIKETN PNVFVIVDAITAGVEPLEITHVLDALIG SQKAFMLPPAMSLVALSQNAIERIEER NVGFYFNLKSELKNQRNNTTSYTAPIL HTLGLQRYFELVQNLGGFEALYR
HP0830	3123	AAAGAATGCAAAATTGATGACGCAATTATTGCAACGCTTGAAACAAATGAGCATGCTAGAGATTAAAGATGAGCATAAAG AGAGCGTTAAAGGTCAATTTAGCGGAGGTTTATGCTTTGTAGAAAACATTTTCGCTTTAGAAACTAGCGCGCTAAAAA CAGATATAGAGCTATGACCCCTTTAAGAGAAAGACGAGCTTAAAGCCCAACCTAACCCGCCAAAGAGATTTTGAAGC CAAAACAAACACAGCCAGGATCATCTCGTTGTGCCCCAAGATCATTAAGTTTATTGAATAGGTTTTCATATCA AGTTAAACCTTGATTTTGAATCAACACAGACAGAAAAGCTATCGCTTGATCCAATTCAGCTTTTACTA	3124	KECKLMTHYCNAWKN

HP0830	3125	GTTCTGCTTGTAGTCACTTAGGAGCGGAGCATGCACGCAATCTTACTTACCCAAACATGAGAGCGGTACCTTAA AAACGGGTTGCAAGTCGTGAGCGTCCCTAGAAAATAAAACCGGGTTATAGAAGTGATGTGCTTTATAAAGTC GGCTCTAGAAACGAAACCATGGGAAAGAGCGGATCGCTCACATGTTAGACATTTGAATTTTAAAGCACCAAAA CCTTAAAGCCGGCAATTTGATAAAATCGTTAAGCGTTTGGGGCGTGAGTAACGCTTCTACGAGTTTGTATATTAC GCGCTACTTCAATTAACACAGTCAGGCTAACTTGGATAAGCTTTAGAAATGTTGCTGAAACCATGGGTTCAATTGAA TTTAAAGAGAGATGAGTTTTCCTGAGCGTCAAGTGGTCTGAGAAAGCGGATGGCGCACTGATAATCCCTTA TCGGCATGCTTTATTCGCTTTTAAACACCGCTTATGCTATCACCCCTACCATGGACGCCCATGGTTTATGG ATGATATTCAAAATGGACTTTAAAGACATTAATAATCCATTCGCTCTATTATCAGCCTAAACCGCTATCGTTTG GTGGTAGCGGATGTCATTCCTCAAAAGGTTTGAATGAGTAAAGCATTTGAATCCTTAAACCATGATGAA AAAGCTATCCACCCCTTACATGAAAGAGCCTAAGCAAGATGAGCGCAAGCGGAGTCTGTCATAAAGATGGGG TCCATTTAGAAATGGGTGGCCCTTGGGTATAAAGTGCCTTCAAGCATAAAGATCAAGTCCGCTTAGACGCACTA AGTAGGCTTTTAGGCGAAGGCAAAAGCTCGTGGTGCAGGCAATAGTGATAAAACCGCTTGGCTTCTCAAGC TTTCTCGCAACATGCAATTAAGAGATGAAAGCGGTGTTTATTTCATTCGGGGGTAACTCTAATGTCAAAAGCCGA AGCCTTACAAAAAGA	3126	SVLLVTLGASMHAAQSYLPKHESVTLKN GLQVSVPLENKTGVEVDVLYKVGSR NETMGKSGIAHMLHLNFKSTKNLKAG EFDKIVKRFGGVSNASTSFDITRYFIKT SQANLDKSLELFAETMGSNLKKEDEFL PERQVVAEERWRITDNSPIGMLYFRF FNTAYVYHPYHWTPIGFMDIDIQNWTLK DIKHFHSLYYQPKNAIVLVGDNVSQK VFELSKHFESLKNLDEKAIPTPYMKEP KQDGARTAVVHKDCVHLEWVALGYKV PAFKHKDQVALDALSRLLGEGKSSWL QSELVDKKRLASQAFSHNMQLQDES FLFIAGGNPNVKAELQKEIVALLEKLK KGEITQAEELDKLNQKADFISNLESS DVAGLFADYLVQNDIQGLTDYORQFLD LKVSDLVRVANEYFKDTQSTTVFLKP
HP0830	3127	GGAGCGAGAAAGCCTTAAACTAAACAGCGGCTTGAAGTTTCCAACAGGAAAGCTTCTGCTATGAAGAACGAA ACGATTGGAAGCGGCGATCTTAAAGAGGTGTGTGAGAAATCAAAAGCGCACTACCTTTGGGATCATCTCAGCCTT TAAACCCCTTAAAGACGCTTTTACAGAGATTTCAATCATATGAGCAAAAGTTACTGATAGGGCAGCTAAAGCGG TTGCATTCATCTAGCGCTGATAAAGTGGCTCAGTTAAAGCGCTTACTCTACTGCAAGACAAATCTGTTAAAGT GGATTGGGATAAACCCATTTTAAAGGACTTCTTAAAGGCAATTAATACCTTTATAGGAGTTTGTGTTTATTG GGGAAGCATTTTATGGACAGATTTTAAAGATAACGCTAAGCGGAGCTTAAAGACTTTATGCTAGTAAGGAGTTT GTCGCTAAATACCGATACACCCCAAGCAATACAGAAAGAGCGAAAGCTGCAATCGTATTAGAGAATAAGCG CGATTTTATAGGTTGTCAAGCGCTTAACTCTTTAAAGACAAACCCCGCAAGATCCTTTTTTACCCAATGAAGAAAC GAGCTT	3128	SEKASKTKNSAIEVSNTKASAMKNETI GSGDLKKVCEKIKSALPFGIISAFKPFK DAFYRDFNHNEQKLIJGAASKSGCIQSS ADKLAQLKTRLLYWKDKSVKVDWDKP ILIKDFFKGNNLYRRFCFLGKHFMDR FLKNNAKASVKDFMSKSEFVAKYRYTP KQNTERAKKLQSYLENKRDFIGFVQAL NSLKDNPQDPFLPNEETS
HP0830	3129	TGATGAGATGCGAGCGGAGCGTTTGAAGCGCTTCAACCGCAAAAGCGTTTCAGAGAAACGCGCAAAAAAC GCAGAGATTCAAAACCATGAAGCGTCTTCGCACCATAAAGAGAGCATCGCCCTAACAAAAAACCAACCAACCA CAACAAAAACATGCCAAACACGAAATACGCCCAAGAAATGGATAGCAACAAAGTAGAGGCGTTACGGAA TTTTGCATGTGAATGAGAGAGGACTTTAGGCTTTCATAAGGAGTTAAAGAGGCGTTGAAGCGGAATAACAAAGATC CAAGTGGAGCATTAACCCCGCATTAAGATGAATGAATCAAGCGGAGCTTAAATCAAGCGCTTTAGGGGG CTTGGGTGAGATTGGGGGAAACATGATGGTCAATGAACCCCAAGCGGATCGTGATTGATCGGGCATGAGC TTCCCTAAAGAGGGGCTCTTTGGCGTGGATATTTAATCCCGGATTTTCTTACCTTGCACCAATCAAGGACAAATC GCTGGCATTATCATCACCCATGCCATGGGCTGATTGGGAGCAAGTTTGAATGAATCCACATCACGCAATCTA CCTTTAAGATCGTAAAGCGCTGTCCCATGAGCGGCAATTTATCATTTGAATGGATCCACATCACGCAATCTA TCATTGACAGAGCGCTTTAGCGATCCAACTAAAGCCGGAACGATCATCCACACCGCGATTTTAAATCGATCAC ACCCCGGTGGATAATTGCGCACGATTTGATCGTTAGCGCACTATGGCGAAAGGGGGTGTGCTTCTTTAAG CGATTCCACCAACTCCATAAATCCGGGACTACGCGGAGTGAAAGCAACCATAGCGCCGGCTTTTGATACCCCTTTTA AAGAACGCGCAAGGAGGTGATT	3130	DEMAGAFERFTNRKKRFRENAQKNA EYSNHEASSHHKKEHHPNKKPNHHK QKHAKTRNYAQEELJDSNKVEGVTEILH VNERGTLGFHKELKKGVEANNKIQVEH LNPHYKMNLNSKASVKITPLGGLGEIG GNMMVIETPKSAIVIDAGMSFPKEGLF GVDILIPDFSYLHQIKDKIAGIITHAHED HIGATPYLFEKELQFPIYGTPLSLGLIGS KFDEHGLKKYRSYFIKVEKRCPISVGEF IIEWIHTHSIDSSALAIQTKAGTIHTGD FKIDHTPVDNLPTDL'YRLAHYGEKGV LLLSDSSTNSHKSGTTPSESTIAPAFDTL FKEAQGRVIMSTFSSNIHRVYQAIQYGI KYNRKIAVIGRSMKLNLDIARELGYIHL PYQSFIEANE

[illegible]

HP0406	3139	AAAACAAACAGAGTGGGATAGAACTCGCTAATAGTCAATAAAAGCAGAAACAAAGACAAAGACAGAAACAAAG AAAACAAACAGCAATAGAGTGGGATAGAGTTAGAACAGCAAAACAAAGACCAATTAATACACAAAGAGATTGAT TAAAGAACAGAAAGATTTCATTAAGAAACAGAAACAAATGCCAAAGAAATCATAATCAATCTTTATTAATAAAATTAG GAATTAGGGTGGCATTGCTATAGAACTAGAACTGAATGCAAAACCCCTAAACCTGCAAAACCAATCAAAACCCCT ATCCAGCCAAACACCTCCCAACTCTAAACACCTCATTCTCAAGAGGATCAAAAGCGCAAGAGTTTATCGCTTAT TTGCAAAAGAGCTAGAAATTTCTGCC	3140	KTNKSGIELANSQIKAEQERQKTEQEK QKANKSAIELEQQKQKTINTQRDLIKEQ KDFIKETEQNQCENHNQFFIKLGIKG GIAIEVEAECKTPKPAKTNQTPQPKHL PNSKQPHSQRSGSKAQEFIA'Y'LOKELEF L
HP0406	3141	AGAATTGAACCAAGCCCAAAAGGAAGTTTAAACACGCTTAAACACCGATCCCAAGCGCAAAAGCGTTTCTAT CGCTGCAATTGAGCATGAAGAAGTGAATTAAGTTTCTCCACTCAAGCGAATTGGATATTGTTTGGGTGGGGGA TCGCTAAAGGGGGCTGTATTTAGTGGGGGAGTCTGGGGTGGGAAATCCACTCTGCTTTTAAAGTGGCTTC TGGCTTAGCCAAACACAGCAGAAAGGTTTGTATGTAGCGGGGAGAGAGCTTGAGCCAGATTAAATGCGTGCC ATTAGATTGGATTGCATAGAAAGAAAGATTGTATCTGCTCAATGAATCAATTGGCTGTGATTAAAGCGCAATATTGAG AGCGAAATATTGCGTGGTGAATTGATTCCATTCAACGCTCTATTCCGAGAGATTCTTCAGCGCCCGCTCT ATTCGCAAGTGCAGAGATCACITTTGAGCTCATGCTGTTAGCTTAAACAAAGAGATATTGCTATTTTATCATCGGT CATATCACTAAAGAGGAGCATTGAGGCGCTAGAGTTAGAGCATATGTGGATAGCGTGCTGTTATTTGAAGG CGATCCAGTAGGGAATTAAGGATTTAAGGAGTTTAAACCCGCTTGGCCCTACGAGTGAATCGGCTTGTG AGATGAAGAGCAGGGTTGTGAGCGCTAAAGAGCTTCAAGCTTGTGTTTCTAAAGAGAGCCTATGGAGGGG AGTGCATTACTATCATTAGAGGCTCAAGAGCGTTGATTTAGAGATTGAGCGTTGGTGAGCGAGTGCGAGTTT CGGATCACCCAAACGATTAGCGAAGGGTTTGACACCAACCGCTTAAACATGCTTATTGCTTTGTAGAAA	3142	ELNQAQKEVLNTLKKPIQQAQKSVSIAA IEHEEVKFSSTQSELDIVLGGGIAKGG YLVGGSPGVGKSTLLKVASGLAKNQ QKVLVSGEESLSQIKMRAIRLDCIEKE LYLLNEINWPVIKANIESENYFACVIDSI QTLYSPEISSAPGSISQVREITFELMRL AKTRDIAIFIHITKEGSIAGPRVLEHM VDSVLYFEGDPSRELRLRSFKNRFGP TSEIGLFEMKEQGLVSAKEASSLFFSK EPEMEGSAITITLEGSRALILEIQALVSE CSFGSPKRLANGFDTNRLNMLIALLE
HP0406	3143	TTTAGACGATAAGAATAATTACAATTTACCAAAATCCAGCAATAACACGAAATTTAAAGCGGTGGCTGCGCAAAAAA GAGCGAAGATTAGAGATTGTGTTGAGCGCTCGAATCATTAAAGTGCTAGAAAACGGGAATTATTTCATCTATGGGA ATAAGGAAGTGCTAGTGGATGGGGAAGCAATCCTTAAGTGAGTGGGTGATCCGCCCTTATGATATTGAAG GAATAACACCATCCAA	3144	LDDKNNYNFTKSSNNTNFKGGGQKK SEDLVLVSARIKVLENGNYFYIGNKEV LVDGEKQILKVGSGVIRPYDIERNNTIQ
HP0406	3145	CATGGAAGAAATGCGTAAAGAAATCATGCGGTGCTTCAAAAATACACTAAATCTTCAGACATCCATTCAAAACCCCTT GACAGCAACAGAGCGTGGAACGATTGAAGTAGAGATTATATTACCTAGATAGTGAATCAACGAATGAAAGCCAC TTCCAATACAGCACGCTAGAAAATATCCCTAAAGCCTTGACATTCTCAAGACCCCTTAAACACTCTATTGTGTG GGCGATACCAAGCTTTTGGACACGCTTTTAAAGTGGCGATCATAGCACAAGAACCCCTTACAGCAAGC AACACACGATCACTCTAGCTAGAGAGCTTGCTAAAAATGGCGGTTATTGTAGTGGGGAGCGTTAGGCGTGGA TATTATCGCTCAAGAAACGCTTGCCAAACGATCATGCTTTCGCTTGCAGTTTGGATTTCATCTATCCTACGAA CAATCATAAAGTGATCCAGAAATCGCGCAAAACGGCTTGATTTAAGCGAATATGAAAGGATTTCATGCCCATTA AGGCTCTTTTGGCGAGAAACCGCTGGTGATCGCTTAAAGCGATGTTGATTATCCCAAGCGGATTAAAAA GGGCTCTATGAGCAGCGGAGATTAGCCAGAAATACCAAAAGCCTTATTGTTTACCCCAAGCGCTGAATGAG AGCGATGGCACTAATGAGCTTTTAGAAAAGGGCAGGCTCAAGGATATTTAATATCAAAATTTTATAAACACCCCTT TTAAAGACTACCATTTAAAGAAATGCCTGAAATGGAAGATGAATTTTAGAATATTGTGCCAAACCCCGAGCTAT GAAGAAGCGTATCTCAAATTTGGGGATAAGCTTTTAGAATACGAGCTGTGGGTAAAGTCAAGCG	3146	MEEMRKEIIAVIQKYTKSSDIHFKTLD NQSVETIEVEILPR
HP0406	3147	AGAGCCTTTGGAAAAAAGCGATAGAAAACGATTGATTGCTTGTGAAAAAACCGATGAGCTTCAAGCCA TTTAGTGAAATTGCAATGCAGTTTGAAGAGCCCAAGAGAGTAAAGTTTGTGAAACGCTAAACGACCGG CTATAAAATCGGCTTTAAAGAGGGCGGAGAAAATGCGTAACGAACTCACTACAGCGTGAATGAAGAAAACCC AGCTTTTGCATGCGATCACCAGTTTAGATGAAAAAATGAAAAATCAGAAAGATCATTTAATGGCTTTAGAAAAGGAAT GAGCGGATTGCGATAGATATAGCTAAAGAAAGTATCCTTAAAGAAAGTGAAGACACAGCAAAAGTAGCCCTTG CTTTGGCTGAAGAGCTTTAAAAACGTTTAGACGCAACGGATATCATTTAAAGTCAATCCCTTGGATTACCCCTTA TTTAAACGAGCGTTTGCAAAACGCTTCTAAATCAATTAGAGAGCAATGAGGCTATTTCTAAAGGAGCGGCTTATGAT CACTAGCTCTAATGGGAGCGCTTGATGGGAATTTAATGGAGCGCTTTAAACG	3148	EPLKKAENDLIDCLLKKTDLSHLV KLQMCFEKAQEEESKVLIENTAKNDGYKI GFKEGEEKMRNELTHSVNEIEKNQLLH AITTLDKMKKSEDLMALEKELSAIAI DIAKEVLKEVEDNSQKVALALAEELLK NVLDATDIHLKVNPLDYPYLNERLQNA SKIKLESNEAISKGGVMITSSINGSLDGN LMERFKT

HP0406	3149	TCCGAAAAAGGTGAACACCCCTAGCGTTCTCTACAAAAAGGCCATTCCCAACAAAAGATTCAAGCTAAAAATTGAAGAA TTAGGCGAAACTATGAAACGCCATTATTGAAGGCAAGATTGTAGGCAAGATAAAGGGGTTATATCGTGGAGTC TCAAGCGGTGGAGTATTTCTCTCCGCTCGCACTCTCTTAAAGAAATGACGCAACCATATCGGCAACACGCGTTA AAGCGTGCAATCATTCGTGTGATAAGGAAACCATCTATCAATATTTCTCGCAACGATTCTTTGAAGTCAATGACA AACGACAACCTTGAAGTTCTAAGGAATTGTTAGAAGCCACAGAGCCGGTGTAGGGTGTGCGCCAGATCACCC TTTTGGCATTCTTTGTAGAAGCTAAGGGATTGAGGGCTTGTCCATTATCTGAAATCAGCCATAAGGGACCAATCA ATCCTGAAAAATACTACAAAGAGGGCGATGAAGTCTATGTCAAAGCCATCGCTTATGATGCAAAAAAGACGCCTT TCACTCTCCATAAAGCGACTATAGAAGACCCATGGGAAGAGATTCAAGACAAGCTAAACCCCGGATACGCCATTAA GGTAGTGGTGAGCAACATTGAACATTATGGGGTGTGTGGATATTGGTAATGATATTGAAGGCTTTTTCATGTTTC TGAATCTCTTGGGATAAAATGTAGCCACCCCTAACCAATTACTGAGCGTGGGCAAGAGATTGATGTGAAAAATCAT TGACATTGATCCAAAAATCGCCGCTTAAGGGTTCTTTAAAG	3150	SEKGEHPSVSYKKAISQKQIAKIEELG ENYENAIIEGKIVGNKGGYVESQGV YFLSRSHSLKNDANHIGKRVKACIIRV DKNHINISIRKRFFFEVNDKRQLEVSK ELLEATEPVLGVVRQITPFIFVEAKGIE GLVHYSEISHKGPVNPEKYKKEGDEVY VKAAYDAEKRRRLSLSIKATIEDPWEEIQ DKLKPGYAIKVVVSNIEHYGVFVDIGND IEGFLHVSEISWDKNVSHPNNYLSVGQ EIDVKIIDIDPKNRRRLRVSLK
HP0406	3151	CGTGGATTTTAAGATCGCTCAAAACGAACAAGAGCAGGATCTGTGGTTTCAAGCGTAACGCTTCTCAAAGTA TTAGCGTTTATGGTAAAAAGAAATTGAATGAAGATGAACCGTTCTTAGGCGAGTTTCCGAGTTTGTGCAAGAA GTCCGCAAAATAAGCCAAAATACGGCTTTAAATCCCTTGTGGCATAAGGCGGATGGCAATGTGCGATGTGAA TATCATGCTAGAAATCTTAAAGGATTTAGAAAAGGCGATGAGGCTATGGAAGAGATTTTTCAGGCGGCTATCA GTTTGGAGGGACTTTAAGCGGGAGCATGGCATAGGCTTGTCTAAAGCCAAATTCATGCCTTAGCGTTCAATCAT AGTGAATGGAGCTTTTAGGAATATTAAAAAGCTCTGTATCTTAATAATTTTAAACCTTTTAAATGGGTTGT AAGATTAAAGCAAGGAAAGCGCATGAAATCGGTGTTTATGAGCGGCGGTCTGATAGGAACTGCTTTTAGAA GAATTAAGGGGGGTATAAGGGATTAGCGCTATCTAGCGTGTGTTAGGCAAAATGCGAAACCGATTTCAGCTC TTTTCGCACGCCCTTTAGTAACCAACGATTAAAGCGTTTGTAGGCGATGCGAATGCGTATTGATTTTCTTT ACCTAAAGCGGTGGATAATTTGCTAGAGGCTCTTTAGAAATGCCCTAAATTTAGTTCTGGCACAACCGGTTTGA AAAAGAAACGCTAGAAAATGCAACAATTAGCCCTTAAAGCACCGCTTTGCTATGCGCAACATGCTCTATAGGGAT TATGATGCTCAACCAATTAGCCCTTTTAACTCTTTGAAATTAAGAGATGCGGATATTGAAATTAAGAAACGCCAC AATCTCAAAAAGATATCCCGAGCGGACGCGGTTGAGTTTGTATGAAACTTGGCTAAGGCTAGGGGTATGATGA AAAAATGCCCTAATC	3152	VDFKIAQNEQEEDLWFSRRNASQSSIS VYGKKKLNEDVTVPASLPSLLQEVAK ISQYGFKIPCFGHTGDGNVHVNMILE DPKRDLEKGHEAMEEIEFOAAISLEGL SGEHGIGLSKAKFMPLAFNHSEMELFR NIKKALDPNNILNPFKMG
HP0406	3153	AGAAGAAATCACGGAGCGTTTGAAGAACAAGCATGCGAGTTTAAATTTAGATAAAAAGACATTGAGCTCAAACACC CGATTAAAGCACAGGGAATTTATGAGATTGAAGTCAAGCTTGATCGGGGTTGTGGCGGTGTTTAAATGATGTG GTGGCTGAGTAGAAAATGTTTGAAGCGCAGCAGGATTTTAGGCTATAGAGGGGAATTGAATCATATAAAGTTGCGGCT CATTGGAGGCGATGGCAGGTAACTTTGGGT	3154	EEITERLKEQHASLNDKKDIELKHPIKS TGIYEIEVKLGSGVGVFKIDVVAE
HP0406	3155	AAAGGTTATCCATTGTACCAATGGATTCAAAAATGGCGCGATATTGCCACTATTAAAGCCCACTAATGTTGATGCG GACAAAATAGCTAGCGATAATCCTATTATGCTTCCATAGAGCCTGATATTGCCAAGCAATACGAACAGAAAAACC ATTAAGGATAAGAAATTTAGAAGCTAAATTAGCTAAGGCTTTAGGTGGCAATAAAGAGATGACGATAAAGAAAAAGT AAAAATCCACAGCAGAGCTAAAGCAGAAAAACAATAAGATAGACAAAGATGTCGCAAGAACTGCCAAGAAATATCAG TGAATCGCTCTTAAGAACAAAAAGAAAGAGTGGGGAATTTGATGAAATGGTAATCCCATTTGATGACAAAAA GAAAGCAGAAAAACAAGATGAAACAAGCCCTGTCAACAG	3156	KGYPLPMDFKNGGDIATINATNVAD KIASDNPIYASIEPDIAKQYETEKTIKDK NLEAKLAKALGKNKDDDDKEKSKKSTA EAKAENNKIDKDAETAETAKNISEIALKNK KEKSGEFVDENGNIPIDDKKKAEKQDE TSPVKQ

HP0406	3157	AATGCCAAGCTCTCAGGCGAGAAATGTTTTTCATACGATCTTAAACCGGAATATGTTTAGACCCCTAACATTTTGATA GAGACGATGAAAAGGCATGGTTTGTGATTTGTGGATATTAGACGGGTGCTTTAAAGAGTGGGAATACGATTTTCT TTACAAGAGTCAAGCTCCCTAACCGGAGAGTCTTAGTTGAGTAGCGAACCTGTGAGTTTAAAGGAAGCGAGCG GGAATAGTGGCTGAGCGTGAATCAAAACGCGTATTAAATAAGCTCTAATAACCTTTGTGGCAACCCCAAAATTA TTTTTATGATGAAAACCTTAAAGATCAATCAATCATGCTAAAGAAACAGACAAAGAAATCGCTCTTAATTTGCT CAATGGCGTGGTTTTATCCATATCACTGACGCAAAACCTATCGTTTTAAATAATGGGATTAGCGTGGTTTTGA TGCGATGCCCTAAGTAGGGGTAAACCTTATCCCAATGATTGGAATATTAGAAATCCGCTTTCAGGCTTGAAAAAA GAGGGCTTAATAATAGCGATCCACCAATATTACCAAAAAAATCTTTGTATCACACAGCCCAATAGACCCAG CTCCCGCTTCTATAAAAGGACAGCCCAATTAATAAACCAACCATACAAAAAACAATCGCGTGGTAAAGCG CCAAGCAATAGTGAACGCGCTCACAAATAGAAATCCAAAGGGGTTTTAAAGATCTTACTTTTTTGCCTAAAGCGC ATGCTCTGCTACAAATTCACCACTAAAGAAATCAAAACCCCAATCAATGTTCAAGGCATCAATAACCAAGCAACT GCACCTAC	3158	MQSSSGENVFSYDLKTEYVLDPNILJET MKRHGDFVDIRRVSLKEWEYDFSLQ EVKLPNARVVLVLSSEPVEFKEASGKYW LSVNQNAVYLVKISSNNPLWQPKIFYDEN LKIQIIAKENRQQEIALNLLNGVRFIHT DAKNPIVLKNGISVWFDAMP
HP0406	3159	AACAAATCCACAACAATGATGCAAAAATCGGATTAAATTATCAGCATGAGTTTTTACTTTGCTATGCTAAAGATAAA AATTATACAAATCTCTGGGGGAGAAAGAAATTTAGAAAATTTACAAAACCCCGATAACGACCTAATGGAGCATGG ATTAATGATAATCCTAGCGCAAAAGTGGAATATGAAAACGGGTATTTGGAGTTACTAATCTTACACAAACAAA GTGGATTATCCGCTGTGGTATGTTTGGCGTTTTTACAAAATACGATACAAAACACATTTGATGAGGGCGGAT TTGCTTTAAAAGAGCATAAGGATAATGAAAGGGGCTTTATTTACAAACGCTATTAAAGGATTTAAAACCCACGCA AAACTTTTGATAGTTGATATTTAGCGATAATGTTATATGAACCAAGCGGCGACTAAAGAACTTTAAATTTGGAA TGGGAGAAATTTTACTTATCCAAAGCGGTAGAAATTTAGAAAACCAACCGTGCATTCGCAATCAACCAAGCAAGG GCGACATCATCTTAGATTTTGTGGAGCGGACCAACCGTGCATGCGGTGATGGAATTAACGCGCAGAGATAAG GGTAATAGGGAATTTATTTAGTTCAATGATGAAGAGATAAAAGAGATGAAAGCGCTTATGATTTTGTAAAGAG GAGTTAAAAGTGCAAGCGCTGTCAATAGCGACATTACCATAGAAAGGTTAAAAGAGCGCGCCCAAAAAATAAGCCA ATTATCAAAAGATAGCGGTTTGGATTTAGGCTTTAAGCTTACCTTACAAAGCAAGTGCAATTTATAACGACAAA GAAGAAATAACGCTTTTAAACCGATCGGATTTAAGCGCTTTGACAAAGCCCTAAATTTAGCCCTACATGCGGCAAA ACGCTCAATCAAGCGCTAGAGATTATCATCAAGACAACTCTACAAATGCGAAGACGCTTACTTTTGTATCGTGTGC GATGAAGAA	3160	TKSTTNDAKIGLNYQHEFLCYAKDKN YTLLGGEKNLENYKNP'DNDP'NGAWI NDNPSAKSGNMKTGYF'GVNTN'PYTNKV DYPPVGMFWRFSQNTIQKHIDEGRICF KKEHKDNERGFYKRYL'KDLKTTQKTF DSLIFDNCYMNQAATKELLNLMGEY FTYPKGVEFMKKIILHST'PNEGDIILDF FAGSGTTVHAVMELNAEDKGNREFILV QIDEEIKEDESAYDFCK'KELKSAKPVIS DITIERVKRAAQKISQLSKDSGLDLGFK VYTLDQKVQIINDKEETL'FNRSDLTPF DKALNLALQCGKTLNO'ALEIHKDKLYKC EDAYFCIVCDEEAQEYLAKSKNEMIFL DGYEEIDLEAFLNLN'ASFKERLSVVY
HP0406	3161	GCCTTTAAAGAGCAAGAAATATTTGAAAACCGCATGGCTTTTAGAAATGGAAAAACAAAAAGAAATCTTTCACAATAAAA AATTGGAAATGGAAAATCCTACCAACAGCCCTAAATATCTTAAAAGCGAAGTCGCTTCAAAAAGATACTAGCTCCA TGCATAAAGAAATCCATAAGCGAGCGGAAATTTAAGCAACACACAAACCAAGAGATCCCAACAAATCATAACGA ACTTTCAAGCCCAACGAAAAAGCGGCTACAAAGATGAAAGCGTGTGATTGTACAAATTTAGACAAGGGCTATTATT GGATAGAAACCGAGCTTGGCATGCGTTTAAAGCGCATGGAGTTTGTGAAAAAATCCAAAAACCCCTAAAAAG AAATTCAAAACCCCTAAACCAACCATTCCTAAACCTAAAGAGCGGAGCTTGGCGCTTGATTTAAGGGGGCAACGCAG CGAAGAAAGCCCTGGATTACTAGACGCTTTTAAACGACGCGCTTTTAGGGGCTTTG	3162	ALKEQEYLKNAWLLEMEKQKEIFHNKK LELEKSYQQAALNLIKSEVASKDTSSMH KEIHKASEILSKHKTNQIIPQIITNFQAN EKARYKNESVLVQILDKGYWIEITELG MRLKAHGSLLKKIQKPF'KNKFKPKTTI PKPKEASRLDLRGQRSEALDLDLDAF LNDALLGGF

HP0406	3163	TGCCACTTTGAAGCGGCATATTAGAGTTTCATTTGATGAAAAAGCCAGGATTGCCGGGTAGAAAATCAAGGGTT ATGGGACTGAAAAAGGAAAAAGACGGCTTAAATCCCAATGGGATCAAAAAGGCGACACCTTTGATGAGCAAAAA TTAGAGCATGCTAAACCGCTTAAACCGCTTAAAGGGCAGGCTATTATGGAGCGTGGTGGAGTGGCGCA CAGAAAAGGTCAAGTGAAGGTGCTATTGATCGTGTGATGTAAGGGGATAGCATTTATATCAAAACAATCC ATTTATAGGGAAGCGGAAATTAACCGCGCATGATTGAATCTTTGAGTGCAGAACAGCAAGAGATTTTCATGGG CTGGATGTGGGCTTGAATGACGGGAATTCGTTTAGATCAACTAGATCTATCGTATCCAGATGTGT ATATGCGTAGGGTTACTTAGACGCTCATATTTTCGCCCTTTTGAACCGGATTTTCTACCCATGACGCTAAGC TTCATTATAAGTCAAGAGGGGATCCAAATACAGGATTTTCAAGATTTAATAGAGATTGACAAACCGGTAGTCCCT TAAACCTTAGAAAAAGCGCTTAAAGTGAAGGAAAGATGTCTTAAATTTAGCATTTAAGAGCGGATGCGCAAA TTTTAAACCGAAATCGCGATAGGGTTATCGCTTTCGGTGTGAAGCCAGACTTGATGATAAGATGAAAAAAC GGCTTGTGAAGTCAATTTATCGTATTGAAGTGGCGATATGGTGATATCAATGATGTCATCATTTTCAGGGAACAG CGACGAGCGATAGGATCATTAGAGGGGAGTTATTGAGGCTAAGGATAATACAACTTGACCAAACTGAGAAA TTCCGAAAATTTTAAAGCGTTTAGGATTTCTCTCTAAAGTCAAAAATGAAGAAAAAGGGTTAATAGCTCACTCATG GATTTATTAGTGAGCGTA	3164	ATFEGGILEFHFDEKARIAGVEIKGYGT EKEKDGKLSQMGIKKGDTFDEQKLEH AKTALKTALEGQGYGYSWEVRTEKVS EGALLIVFDVNRGDSIYIKQSIYEGSAKL KRMIESLSANKQRDFMGWMMWGLND GKRLDQLEYDSMRIDQDVYMRRGYLD AHISSPFLKTDFSTHDAKLHYKVKEGIG YRISDILIEDNPVPLKTELEKALKVKRK DVFNIEHLRADAQILKTEIADKGYAFV VKPDLKDEKNGLVKVIYRIEVDMMVYI NDVIISGNQRTSDRIIRRELLGPKDKY NLTKLRNSENRLRLGFFSKVKIEEKR VNSSLMDLLVSVEEGRTGQLQFGLGY GSYGGLMLNGSVSERNLFGTQMSLSL YA
HP0406	3165	AAAATCGCTCAAAAAATCGCCAAAAAGTTAAATGATGGCTTAGAAGAGGTAAAGTCCCTTAGCTTAGTGAAA ACCCGTTATCAAGCCCAATGAACAAGACGCTCAAGAAATGATCAAGAGGTTTGAAAAACGCTTTTAAGGAA TTAGGGATTGAAATAGGATCTCATCGGCGCCCAATCTCAATAATTTGAAAAAAGACACGCTTTTGAATA GAAGCGGACATCGCTTAAACCCAGGATTGTTTAGAAGATCAAGAGTGCCTAGCTAGCGTGGAGTGGAAG TTCCAAATGAAGAAAAATGATGAGCGTTTGAACAGCTCGCTAAAGATTATCGGAAATTTGTGGATACCAACATC AAAGAAAGCTCAAAATGACGATAAATTAACGATTGATTTGAAGGCTTATAGATAATGCGCTTTTGAAGGGGCA AGGCTGAGAAATTTCAATTTGATTTAGGCGATGAAGCAATGCTAGAAGATTTGAAAAAGGCTCTTTTAGGCATGCAAG CGGGTGAAGAAAAAGATTCCTTGACTTTCCTAGCAATACC	3166	KIAQKIAQKVKIDGFRRGKVPLSLVKTR YQAEQDAQEEMIQEVLEKNAFKEIGI ENKDLIGSPNLTKFEKKDTHFEIADIG LKPTIVLDKIKECVPVSGVEVPNEEKID ERLQKLAQDYAKFVDNTQKKAQND KLTIDFEGFIDNAPFEGGKAENFNILG SKQMLEDFEKALLGMQAGEEKEFPLT FPSKY
HP0406	3167	AAAAAGAAAGGTATTGGCTGTGCTATGAATGGCGAAATGTTTACGCCGATCCTAAAAGGACCATACAGAA AAATCAGAACCCGGGTGTTTATCTCCACTGTTTGATAAAATGGAAGGGTTTTAAATCCAGCCGGTTTGTC AGGTTACCATAGAGCCTATGATGGGAAATCTTTGATTTTACGATGGATTGAGCGAGTTGGACATTCAA GAAAAATCTTAAACCCACCTTCAAGCCATAGCGGGGTTAGTACACTATGTTAAGGGAACGGATAATC TAATGACCGCATCAAGAGCGCTTTGAATAAGATTTTGCAATATCATGCAAGAAATAGACAAAAAATCACTCAAA GAATTTAGAACTTATCAAAAGACCGCAAGGAATTAAGGCAAGAAACCGATAAGAGCAAAATACGCATAAAA AAGAACGCTTGACAACTGCTTAAAGGGGTTTACGCTTCTTTTGAAGGCTGTTTAAAGGGCTGATGTTTGG TTACTTACCATCATCAAGAAAAAGATCTAGGATACCGGTTTACGCAAGAGTGTATTAAGGGCTGATGTTTGG ACCTCCGCTTTTACTAAGCCTAAAGCCCTAAAGAAACCTTTTAAATATAGACAAAGCTCCACTATTATGGCAC AAGCGTGGTCAAAATGCTAGCTACAGAGTAGGGAATAATTTGAAACCATTAACATACCGAGACATTCCTTTTC TGAAGTCAGTTGATTTATGGCTATAACAAATTTTCTTAAAGAGCGCTACGCTTCCGTTTATGCTCTTTG GATTACGCTTATGGGTTTTCTTAAATAAGGGCGTGTGGCGATAGTTGAGGGAGAGTTCCGCAATCCCTAAA AGCTATAGAGAAAAATGCAAGAAAAAGAGACTTTTATTAACGCTATTTTATGGCGCGGAGCTGACTTTTATACA AACGCGCTTTT	3168	KKEGYLAVAMNGEIVLRPDPKRTIQKK SEPGLLFSTGLDKMEGLVLPAGFVKVTI LEPMSGESLDSFTMDLSELDIQEKFLK TTHSSHSGGLVSTMVKGTDSNDAIKS ALNKIFANIMQEIDKKLTQKNLESYQKD AKELKGKRRNR

HP0406	3169	TTTTAGCCTTAAATCCCTATTGGCGTGGAAGAGGGCGGAAAGATTAGGGTCGCAACAAGGGGAAACCGGGCGGA ACGACTAGGGGGGCGATTGCTCTTAGAGATCCATATTGAAGAAGATGAATGTATAGCGCGGAGAAAGATGATATTAC CCAAATCTTTGATTTACCTTAAACCGCTCTTTTGAGGGGAAATGAAATCGCTACTTGGCATAAACCTTAACCC CTAACCATCCCTAACACCAAGCGATGCAAAATCCGCATTAAAGAAAGGGATCAAAACAGAAACAACTTCG CATGTGGGGATTGTATTGAGGCTCGTTGATTGCTTAACTGAAACGCTTCTAATGAGTTGAAAGCGTTA TTAGAAAAGAAATTGTAAGGAGGAATCGTGTGCGATTATGATGAACCGCTTTAATCAGCGTCGTGGCTAAATC TTAGGCGTGACCCCTCAAAACCTTGCGCCAATACGAAAGAGGGTTTATAGAGCCCTAGCAGGACTGATGGGAAA TGCGCTTGATTTCCCAACGAGACATGGACAAATCAAAACGATTACGCCCTTACAAGGGATATGGGGTTAATCTT GCGGGCGTGGATATTATCTTGGCTTAAAGAAAGCTTGATGAATTAGACAACCTGAATAAGAGTTGCAAGACGC TCTGCACAAACACTCTAAATAACCAACCCCAACGAAATTTAAACACCCCTACGAAATTTTACGAAATTGATTTA TTTAAATAATGAGCCTGACTTCGCTTTTAAACCCCAAAAGCCTAGAGATTTTTAGGCCAAAGAGCATTTAGTAGGGA AAGACGCCCCCT	3170	FSLKPIGVEEGEKIRVRNKGKTGRTR GDLLLEHIEEDEMYRREKDDITQIFDLP LKTALFGGKIEIATWHKTLTLTIPPNTKA MQKFRIKEKGKIRKTSHVGDLYLQAR LILPKTETLSNELKALLEKEL
HP0406	3171	ATCAGCATGCTTTTAGACGTGAAATTGAACGTTAAGGTGCGCATCGGCAAAAAAATGATTTTAAAGACGTGGTC TCTATGGATATAGGAGCGGTGGTAGAGCTGGATCAATTGGTGAATGACCCCTTGGAAATCTTGTAGATGACAAGGT GATCGCTAAGGGCGAAGTGGTATTGGGATGGAAATTTGGCATTCAAATCAGGATATTGGCACTAAAAAGAAC GCTTAGAACAAATTGAACATTAAATCTTTTATCATAAAGAAAGGATATGGCTATTTTGGGAAATTAAGCTCGC TTGGGCATTTGTTTAAAAAACGCAAGAAATTGGAAATTTGATGAGTATTTAAAGAGGTCATGCAAAAGGGTAGTA AAGCGAATCAAGGGTTTAAACCTCGCTACCAATACGGAATTTCAAGTGCCTTTAGGCGATGGCATCTTTAGCATAG AGCAGAGTTATTGTTAGAGCATGCCAAAGAAAGCGAGAAAGTTTGTGAAAGCCACAAAAAATATGTGGATTTC AGCTGATTGTCAAAGCGGTGAGGGGGCTAAAGCGGTGGGTATCAATCAGGCTGTCATTAAACCCCTTACGATGAA AAAAGAGATTGATCGTTTATGAGCCGTTAGTGAAGCTCTTTTGGCTTGCATGCGGCGATGCTGGCTATTTT TTTGAAAACGATGCGCATGCGTTGAGGTTTATGGAGAGTCTTTTGAATAATATAGGGAAGAGCCGATTTTAAAGCG GTGCTTAAAGCGCCCAAGGATTGATCAAAATTAATA	3172	ISMLLDVKNVVRIGQKMMILKDVVSM DIGSVWELDQLVNDPLEI.VDDKVIKGG EVWVDGNFGIQTIDIGTKKERLEQLKH
HP0406	3173	AAAGACAAACAGAGGCTAAAGAGCCCAAAACCCAGTAAGCCCAAGCCACCCCGCCCAAAACAAACAAATC CCATAAAATTGATTTAGCGATGCGAGGGATTTAAGGGCAATGATATTTATGATGATGAACCGGATGAATCTTATT GTTTGATTTGCATGAACAAGATAATTTCAATAAGGAAGAAAGAAAGAAATCCGCCAAATATCAACGACAGGGT GCGCGTCCAAAGAAACCCCTTGATGAATGAAGCGGGATCAACGACAAATCCAGAAACAAACGCGCATTCGCT AACGATAACAGCCAAAGTGATCCAAAGCAGCTGCAATCCCTGAAGAAGTGGCGTCTATGAATTCGCGCAAA AGCGAATTTGAATCTAGCTGATGTGATTAAACCCCTCTTAATTTAGGCTTATGGTAACCTAAACGACCTTTTGGAT AAGGATAGCATAGAAATTTAGCCGAAGAGTTCCATTAGAAATTTCTGTTCAAAACACCTTAGAAGAAATTTGAAGTAG AAGAAGTCTAGAGGGGTGAAAAAGAGCGCCCGCTGTGTTACTATCATGCGGCTGTTGATCATGTTGATGATAAAC TTCACCTGCTGATAAATCCGTGATAAAGAGTCGCTCACACGGAAGCTGGGGGATCACTCAGCACATTGGCGCT TACATGGTAGAAAAAATGACAAATGGGTGCTTTTCATTGACACCCAGGCGATGAAGCCTTTAGCCAGATGCGTAA TCGTGGGCTCAAGTAACAGATATTGCAGTGATTGTAGAGCGGCTGATGATGGGTGAAGCAGCAGACTATTGAA GCTTTAGAGCATGCAAGGCCGCTAATGTGCCTGTGATTTTGGCATGAATAAAATGGATAAGCCTAATGT	3174	KDKQEAkakKPSKPKATPTAKNNKS HKIDFSDARDFKGNIDYDDEITLFD LHEQDNFNKEEKEIRQININDRVRVQ RKNPWNMESGKIRQSKI'KRAFRNDNS QKVIQSTTAIPEEVRVYE'='AQKANLNL DVIKTLFNLGLMVTKNDFLDKDSIEILAE EFHLEISVQNTLEEFEEVEEVLGVKKE RPPWVTIMGHVDHGKTS.LDKIRDKRV AHTAAGGITQHIGAYMVEKNDKWVSFI DTPGHEAFSQMRNRGAQVTDIAVIVIA ADDGVKQQTIEALEHAK/ANVPVIFAM NKMDKPN

HP0406	3175	CATTAAAGCGCTGAAAAACCCCAATGTGCGTTTAAATGACATGGCAGGCAATGAAGAAGCCAAAGAAAGAGTGGTAGAAA TCGTAGATTTCTTAAATACCCGTAACGATACGCCAATTTAGGGCTAAATCCCTAAAGCGGTGTTATTAGTAGGGC CTCCAGGAACCGGTAAACCCCTTTAGCCAAAGCGGTAGCCGGCAAGCGCATGTGCGGTTTTCTCTATGGGAGG GAGCAGTTTCATTGAATGTTTGTGGCTTAGGGCAAGCAGGTTAGGGATTATTGAAACCGCTAAAAACAAG CCCCTAGCATCATTTTATTGATGAATTTGATGCAATTTGATGCCATAGGTAAAGAGCCGCTGAGGCGTGGTAGCGGAA CGATGAAGAGAGCAACCTTAAACCAAGCTCTTAGCCGAATTTAGTCCGCTTAAAGCGGCAATGCGCCTGTAATTG TCTTAGCCGCAACGAAACCGCCCGAATCTTAGATCCGCGTTAATCGTCCAGGCGCTTTGACAGGCGAGGTTTT AGTGATAAGCCTGATTTAATGTTAGGTAGGTAAGATCTTAAAGTGCATATTAAAGCGGTGAACTTGCTAATGATGT GAATTTGCAAGAGTCCCAACTCACTGCAGGCTTGAGGAGCGGATTGCGCAATATTATCAATGAAGCCGCA CTTTAGCAGGAAGAAACCAACCAAGAGTCAAGGAGCAACATTTAAAGAGCGGTTGAAAGAGGAGGATTGCAGG GTTAGAAAGAAAGCAGGCGCATCAGTCTAAAGAAAGAAATCGTCCCTACCATGAAAGCGGCGCATGCCGTG ATTTCTGAATGACTAAAGGAGTCTAGGTTGAATAAGTCTCTATCATCCAGGGCATGGCGGCTTTGGGCTA CACCCCTAACACGCTGAAGAAACCAATACTTGTGATGCAAAAGCACGAACCTCATCGCTGAAATTGATGTGCTTTTAGG CGGGAGAGCGGCTGAAGATGTCTTT	3176	INAEKPNVRFNOMAGNEEAKEEVVEIV DFLKPERYANLGAIPKGVLLVGPFG TGKTLAKAVAGEAHVFFSMGGSSFI EMFVGLGASRVRLDFETAKKQAPSIIFI DEIDAIGKSRAAGGWSGNDEREQTLN QLLAEMDGFSENAPVIVLAATNRPEIL DPALMRPGRFDRQVLVDKPDFNGRVE ILKVHIKGVKLANDVNLQEVAKLTAGLA GADLANIINEAALLAGRNNQKEVRQOH LKEAVERGIAGLEKKRRISPKKIVA YHESGHAVISEMTKGSARVNKVSIIIPR GMAALGYTLNTPREENKYLQKHLEIAE IDVLLGGRAAEDVLEEISTGASNDLER ATDIKGMVSYGMSVSGMLVLEKQR NAFLGGGYSSEFSEKTAEEEMDLFIK NLLEERYKHVKQTLSDYREAE
HP0406	3177	GAAAAAGACAGCTCTATTATGATGATTAGAGCGTTGAGATTGAGCGGACCACTCATTAGGTTATGATGAT GTGATCGTGATAGCGAGCTTTCGGCTAATTATGGTTGGTAACCTGAAGAATATTTAAAGAGTCATGGAATAATC AAAGTGGCGGAGAGCGGCTTACAGAGTCTTAAAGCTAGTGGAATGGCTATAGCCGTAATGAAGTGGT GTTTGATAGGGGAGCTTTAGAGCGACCGGAGATGCGTGATATTTCCCGCTTATAATGACGCTGAATTTATTA GGATTGAATTTTGGCGATGAGATAGAAAGGATTGCGGCTTTAGACGCTTAAAGAAATGAATCAAGCGCTTGG ATTCTGTCATGCTTTAAGGTTAAGGTTGAAATTTTAAAGAGCAGGATAAATGCTTGAATACACCGCTCAACACGCAAC GATGAACGCTTTAAGGTTAAGGTTGAAATTTTAAAGAGCAGGATAAATGCTTGAATACACCGCTCAACACGCAAC GAGCATGATTAGAAATGATTAGCGGACCGGTTGTGTAAAGGCGATTGAAATACGCGCGCTTACCGGTA AGCCCTAACGAAACGCTTTTGGCTTTGTTGATTATTTAGGATTTTGGCGGAGTTTATGCTATTGCTGATGA AAGCCATGTGAGTTGCCACAGTTTGGGGGATGTATGAGGGGATGATGAGCAGGAAAGTGTTTAGTGGAATAT GGTTTATGATTGCGCTAGCGCTTATAGACAAACCGCCCTTTAAATTTGATGAATTTATCCATAAAATTGCCAGTTCCTTT TTGTGTCGCT	3178	EKDSSINDDLERLRLSATTSLGYDDVI VIASVSANYGLGNPEEYLVMEKIVG EKRAYKSFLKLKLVEMGYSRNEVWFR GSFRATGECVDIFFPAYNDAEFIRIEFFG DEIERIAVDALEKNEIKRLDSVMLYAA SQFAVGSERLNLAIKSIEDLALRLKFF KEQDKMLEYNRLKQRTHEHDEMISAT GVCKGIENYARHFTGKAPNETPFCFLD YLGIFEREFLVIVDESHVSLPQFGMY AGDMSRKSVLVEYGFRLPSALDNRPL KFDEFHKNQCQLFVSA
HP0406	3179	TCCAAACAGCTGAAAAAGAAATCAATCAATTGGTGGAATATTACAGATTAAATAGCGACAAGTTTATTATTAG CCGCTTGTAGTGTGTGATATTGATAAACAGATAGATTAGAACAAAGAAAAAGAGCTGAAACCGCTAGGGAT AGAGCGAAACAGAGTGGATAGAACTGGAACAGGAAAAACAAAGACCAATTAAGAAACAAAGATTAGTTAAAAA AGCAGAACAAATTTGCCAAGAAATCATGGCCAAATCTTATGAAAAAATTAGGAATTAAGGTGGCATTGCTATAGA AGTAGAAGCTGAATGCAAAACCCCTAAACCTGCAAAACCAATCAACCCCTATCCAGCCAAACACCTCCCAACT CTAAACAAACCCCTCTCAAGAGGATCAAAAGCGCAAGAGCTTATCGCTTATTGCAAAAGAGTTAGAACTCTCTGC CCTATTACAAAAAGCTATCGCTAAACAGTGAATTTTACAGGCCAAGTCTGCTTATTAGAACTAGACCCCTA GAGATTTTAAAGTTACAGAAAGATGGCAAAAGAAATCTAAATACGCTCAAGCTCAAGTAAATGCTTGGAA ATGAGAAACCCCAAGCCACCTTCAACCTCTCAAGCCTTTTGTGTTCAAAAAATATTGCTGATGTTAATAAAG AAATAGAAAGCAGTTGCTAATA	3180	SKQAEKENQINWWKYSGLTATSLLA ACSVGDIDKQIELEQEKKEAENARDRA NKSGLIEQEKQKTIKEQKDLVKKAEQ NCQENHGOFFMKKLGKGGIAEVEAE CKTPKAKTNQTPQPKHLPNSKQPHS QRGSKAQELIAYLQKELESPLPYSQKAI KQVNFYRPSSVAYLELDPROFKVTEE WQKENLKIRSKAQAKMLGNEKPTSP FNLSKPFVRSKNIC

HP0406	3181	TTAAAGACACGCTAACCGGGACACGCTTTGCGATGAAAAAATGCGGTGTTTAGAGAGAAATGGAATTTCCCTGA GCCAGTCATTCACATCGCTGTGGAGCCTAAACGAAAGCAGACCAAGAAAAATGGCGTAGCGTTAGGCAAGCTC GCTGAAGAAGATCCAAGCTTAGGGTGATGACTCAAGAAAGAAACCGGCAACCCCTTATTGGTGGCATGGGTGAAT TGCACCTAGAAATCATCGTGACAGGTTGAAGAGAGAAATTAAGGTGAAGCTGAAATCGGTACGCCGCAAGTCGC CTTTAGAGAGACTATCCGCTCAAGCGTGAGCAAGAGCATAAATACGCTAAGCAAGCGGTGGTGGTGGGCGGT GGCATGTGTTTATCAAGCTTGAGCCTAAAGAGCCTGGCAGTGGTATGAATTTGTGAATGAAATTTCTGGGGCGGT GATCCCTAAAGAAATATATCCCTGCGGTGATAAGGGTATCCAAAGAGCGATGCAAAATGGCGTTTGGCAGGCTATC CGGTGGTGGATTTAAAGTTACCTTTATGATGGGAGCTACCATGATGTGATTCTTCAGAAATGGCGTTTAAATCG CTGGCTCTATGGCGTTTAAAGAACGAGTGGCGGCTAACCGGTTTACTAGAGCCTATGATGAAAGTGAAGT GGAAGTCCCTGAAGAAATACATGGCGGATGTGATTGGCGATTTGAATAGAAAGAGGGCAAAATCAATCTATGGACG ATAGATTAGGCTTGAAATCGTGAACGCTTTTGCGCGTTGGTGGAAATG 3182	LKDTLTGDTLCDEKNAVVLIERMEFPEP VIHIAVEPKTKADQEKMGV/ALGKLAEE DPSFRVMTQEETGQTLIG:GMGELHLEII VDRLKREFKVEAIEIGQPCVAFRETIRS SVSKEHKYAKQSGGRCYGHVFIKLE PKEPGSGYEFVNEISGGVPIKEYIPAVD KGIQEAQNGVLAGYPVDFKVTLYD GSYHDVDSSEMAFKIAG3MAFKEASR AANPVILLEPMMKVEVEV2PEEYMGDVI GDLNRRRGQINSMDRLGLKIVNAFVP LDEM
HP0406	3183	AATCGCGCTTAATGGGCTGAAGCAGAGATAAATCAAAATTTAATAAGCGCTAAATACCTCATGATAAGGTGGT CCAATCCAACCCCTGATTATATTTCTACGCATAGCGAATCAGCCCTAGACTTGTCAAGTTATTGAAAAAACCAGAT GAATGCAAGCGCGATTGAGATCGCTCACTTGTCTCTCAATCAAGATGATGATCTGAAAGCTAAAGAGCAAGCGCTTT ATGATTAGGAGCGTTGATGCAAGGATCAAGGACTTAAACCGCCACCTTTACAATCTGCAATATTGCAAGGAC ATCGGAACTGGATAAGCTTCTGTCTGTTAGGCGCGGATGAAAAAGCCCTTTTTCATGGAGGGGAACACGCA AGAAAAATCGCCCACTATGACAAAATCATTCAAAATTTCCCTAATTAATGAAGCCCTAAAGGCTTAGAATGAAA GCCCAACTATTGTTGAAAAACAAGCGTTATGCTGAAGTGAAGCATGCAAAAAAATTTGCCATAAGATTCCCTTTG ATCCAAAAACGCTCAATGTCTTGTCTAAACCCCATTAAGAACCATCGTTGTGAAGAGCGCTTAAATATTATATCC CAAATCAAACTTTGAATTCAGCCCAAGAAAGAAATCCAAAGCTTTGATTGCTTGTATTTCGCATCGCTCAAAGAA AAAGCGCAATCATGCGCTAAACGCTTTTAAACGGCTAAAGCCCTAGCGAGAAATTAATATGCTTATCGCTCAAAGC GGCGCGCAATTACTACCGCTTAGGGGATTTTAAATAATTCACCTGCGCTCTAAAGAGCGCTTAAATCTCGCTCAAAGC TTGAATAAAAAAGAAATTTATGATATTGCTTTTGTGTTTATTTTATTTTATTTTATTTTATTTTATTTTATTTTATTTTATTTGCTAGAAAAT CCATTTGTATGCGTTTGTAGAAAAGCATTTCAAGGCGGATAAACGCGATGGCGCTAGTTTATTTT	

HP0406	3189	AGCGAACAAATCCAGGCTAAAAAACAATGGAATTATTAGTAATAAGACTTATAAAGAGACGCTTCTTATTGAAAG GAATACAAAAGCTTGCTTTCTAGCGTGGAATTAGCCAAAGGAAACTTAAACCTCCAAAGAGCAGGCTTTTACAAAGGC TTAAAGCACGAACGCTCAAGTCATTGATCGGAGAACACGCTTCTCTATCGTCGTGAGCAAAAAGCGTGCTTA TAAATACATCGTTTATTAGCGAATTAATGCGTTAAGCGATCATATTGATTTATTTATGAATTTGTTTATTAAAGGA AAAAATCATGTCAATAGCATGTTGGATAAAAATAAAGCGATTCTTACAGGGGTGGGCTTTATTATTAGGGCTAAT CGTGCTTTTTTATTTAGCTTATCGCCCTAAGGCTGAAGTGTTGCAAGGGTTTTGGAAGCCAGAGAAATACAGCGTGA GCTCCAAAGTCCCTGGCGCATTTGAAAAGGTGTTTTGTA AAAAGGCGATCACATTAAAAGGCGGCTAAGCGCTTAGCGA GCATTTCTAGCCCTGAATTAGAAGCCAAACTCGCTCAAGCTGAAGCCGGGCATAAAGCCGCTAAGCGCTTAGCGA TGAAAGTCAAAAGAGGCTCAAGAGACGAACCGATTAAATCTCGAGAGACGTTTGGCAAGCAGCCAAATCCCAAGCC ACTTAGCCAAAGAGACTTATAAGCGGCTTCAAGATTGTTGATGATAATGGCGTGCGGAGCTTGCAAAAGCGCGATGA AGCCTATGGGCTTATGAAGCACTAAATACACGAGAGCGCGCTTACCAAAAGTATAAAATGGCTTAGGGGG GCGAGCTCTGAAGTAAGATTGCCGCTAAGGCTAAAGAGAGCGCGCTTAGGCGCAAGTGAATGAAGTGGAGCTT ATTTAAAGACGTCAAAAGCGACAGCCCAATTGATGGGAAAGTGAACGTGCTTTTAAAGCGGTGGCGAGCTTAG CCCTAAGGGTTTTCTGTGGT	3190	SEQIAKKNMELLVNKTYKETLSYLKE YKSLSSVELAKENLKLQEQAFLOGLS TNAQVIDARNLTSSIVVEQKSVAYKYIV SLANLMALSDHIDLFEYFVY
HP0406	3191	GCCCAAGCCCAATGCCTAATCTAGTGATGAGCAAAACAAGACACTGCGGCTAGGGGACTATCTATAGTCAAGACA ACTACAGCCTAGCCACTTACAAACCCCTTTTCAAACTGGGCTTTGATACAAGGTTTTTAAACCCGGATAAAGAAGATT TTTTTATTGATTCTTCTATTATAGCAATATCCCTAAAAGTCTTAAAGACGCCATCAATACAAAAGGCTATATC ATTCTAGCCTATGATCTCACGCCCAATATGGCTGCTAATATTAGAGACTTAAATAAGAAATTTTAGCCTTTGGGGTTT TTCAAAATTTCAAAGACGCGCAGCAGATAAGGTGTGGCAAAAGCAAGGGCTAAACATTGAAGTGAGCGGCTTTCTAGG CATTACCCCTTATCAAAATAGCCTAGAGCCCAATCATTGGCTATGTGCAAAAACAAGAAAGACAGCAAGCTCATTAACT ACCGGTAAAAGGGGTTGAAAATCTCAAGATCACTTGCTTAAAGCCCAACAAATGGCATAAGAACAGGCAAAAG AGACGTGAGTTTAACTTTATCCAAACCACTTATACAGAGGTTGAACGCTTGATGGCTATGAGGTGATTTGAG CGTTCTTTAAAACCTCAAAGAGAAATTGAAACCTTATTGATAAACTAAAGACAACTCAAGGCTAAAGAAATCCT AGTGGGTATCATTAACCCATAAAGCGGGGAAATTTATCGCTAGCTTCAAGCAAGCGCTTCAATCCTAATGCGATTAA AACAGCGATTATGAAAGCTTGAATTTGAGCGTTGCTGAAAAGGTTTTGAGCCAGGACGACGATCAAAACCCATTG TTTATTCTGCTGTAGACAAGAAATTTGATCAACCCCAAGAACGCAATTGATTTAAACCATGGCTATTACCAATTAGG AAATACACCAATTAAAGACGACTTATCCCCAGTAAAAGCCGTTGTGGAAGACATT	3192	AQANMPNLVMSKQDTAARGTIYSQDN YSLATSQTLFKLGFDFRFLNPKEDFFI DFLSIYSNIPKSKLDKDAINTKGYILAYDL TPNMAANIRDLNKKFLAFGVQNFKDA HDKVWQKQGLNIEVSGVSRHYPYQNS LEPIGVYQKQEEEDKLTLTGKKGVEKS QDHLLKAQQNGIRTKRDVSNFIQNH SYTEVERLDGYEYLSVPLKLOREIETL LDKTKDKLKAKEILVGINPKSGEILSLA SSKRFNPNAIKTSDYESLNLVAEKVF EPGSTKIPVYSLLDKNLINPKERIDLN HGYYQLGKYTKDDFIPSKKAVVEDI
HP0287	3193	TGAAACCCCGAATACCGCTAACGCTGATGGTATTGGCAGCTAAGGATTTAGAACCCATGCGGATTTAGGAT TAGAAAAGAAAACGCGCTTTTATCAAGCCAGCAGCGAATTGTATGGCGAAGCTTAGAAACCCCGCAAAATGAA AACACCCCTTTAAACCCAGAACCCCTATGCGGTGCTAAAATGTATGCCTTTACATCACCAAAAATTACAGAGAG GCCTATAACTTGTGCGTTAATGGCATCTTTTAAACCATGAGAGCAGGTAAGGGCGAAACTTTGTAAACCCGT AAAATCACACGAGCCGCTAGCGCGATAGCGTATAACTTAAACGGATTGCTTGTATTAGGGAATTTAGACGCTAAAAG AGACTGGGGCATGCCAAAGATTACGTGAAATGATGCAATTAATGCTCCAAAGCCCATCCCAAGATTATGTGA TCGCCACAGGAAAGACCAAGCGTGCGGATTGTTGTAATGAGCTTTGAAATTTATCGGTATCAATTTAGAAATTC AAAATACAGGGATTAAAGAAATCGTTTGATTAAAAGCGTTGATGAAAAGAGCGCAACGCTTTAAAATTGAACCTAA GCCATTTAAAAGAGGCCAAATCGTGTGCGCATAGACGAGCGTTATTCAGGCTACCGAAGTGGATTGCTTTTA GGCGATCCACTAAGGCAGAGAAAGAGCTAGACTGGTTAGGGAATACGATTAAAGAGTTGGTTAAGGACATGTT AGAAATACGATTTAAAAGAAATGCCAAAAGAAACCTTACTTCAAGATGGGGTTATATTTAAGGAATTTTATGAATGA GATTATTTTAACTACTGGTGCCTATGGCATGGTGGGCGAGAACACGCGCTTGTATTTTAAAAGAAATAGCCTGATGT TACTCTACTCACTCTAAAAGAGCGCAATTGTGTTGTTGGATAAAGACAACGTTCAAGCTTATTGAAAGAAATACAA GCCCTACAGGC	3194	ETPEYTANADGIGTLRILEAMRILGLEK KTRFYQASTSEL YGEVLETPQENPTPF NPRSPYAVAKMYAFYITKNYREAYNLF AVNGILFNHESVRGETFVTRKTRAAS AIAYNLTDCLYLGNDLDAKRDWGHAKDY VKMMHMLQAPIQDYVIATGKTTSVR DFVKMSFEFIGINLEFQNTGIKEIGLIKS VDEKRANALKNLHLKKGQIVVRIDER YFRPTVEDLLLDGPTKAEKELDWVREY DLKELVKDMLEYDLKECQKNLYLDG GYILRNFEY
HP0287	3195	ACTCAAGATAGGAACGCCAAACAAAGCGGCGATACCACTTACCCAAACCACTCTTAAAACGAAAGCGATACCGA TTTTTATTTTAAAGCCAACCGAGAATGGCTAAAAAGTCCGCGAGAAAATGCGTAACGCTCCTATTTTAGAGCTTTA CCAGAGATGGATGGGAGGTTTGAAGATCCTAATCTAACCCCTTTAGAACTCTTTGATAGAAATCCATCATAAAAAAT CGCTAGCGTGCAATTTAGCGGATAAGGAAGCGAATTTTAAAGCCCTAGAAAGTGGCTAAAGCGGATAAGAGCCGTTTCA GTCAAAAAGCTTTACAGAAATCCATGCTTAAATGAGTCAAAACCGCCAGCTTTTITAGAGAAA	3196	TQDRNAKQSGHTTYPNHSFKNESDTD FILKANREWAKKVRKMRNAPILELYP EMDGRFEDPNLTPLVDFRIHKKIAS VHLADKEAILKALEVAKSDKSRFSQKS FTEIHALMSQTAQLFRE

HP0287	3197	TAGCGAATACCTTGTGGTTAGAACGCTGAACGCACTGTGAGATGCTAGGAATTGAATTGCTTGAGGGCGGATT ATGAATTAGAAAAATTTTAGATAAAGCTAAGGGTAAGGAATTGTTAGGGAAAAAGCAACGCTGTTTTGAGTGCT TTGATTTACGCTTAGAAGCGAGTGCAATTGAAGGCCCTTTGAATTAGGGGAAGAAAAATTCACCAACCTTACTACAA GCCCTAAAAAGACCCCTAACCGCTCATCGCTAAGGGCGAGAGCATCGCGCAAGGCACAAATTTGGAATTTGTCGT GTTTAGAACCGATAATTTGAACATTTTAAGAGCGAGTTGGAATTAACCTTGAAGCTTTGCGGAGAGAAAAACGAGCT TTATCGGCAAAATTATTGGGTTGCCAATTCGCTTTAAAAATCCAAAAAGAAATCCCAAAACAGAACGCCCTTTGAGCT TTACTCGCCTTTAAAAAGGCGA	3198	SEYLLRLLEDVKRTCEMLGIELLEGDYEL EKFLDKAKGKELLGEKSERCFECFDLR LEASALKAFELGEEKFTTLLTSPKKDP NQLIAKGQSIQQRHNL:FVVRNDNFE HFKSELDLNLQALARENELYRQNYCG CQFALKIQKESQNRSP:FELYSPDKR
HP0287	3199	GAATAAAACGCCCAAGAGCCCATGAAGCGCATCAGCCCACTTCTATTATTTAGAGCCAAACGCTTTAAAGACTA CCTTAAGCCTGAAGAAATTAAGGCTCTATACCTTAATTAACAACGCTTTTAGCTCTCAAAATGCAAGACGCTCTTTT GAAAGCCAAAGCGTGTGTGGCTTGCAGAAAGGCGAGTTTAAAGCGAGTGGGAGAAAGCTCCTTTTGTGATGGCT ATTATAAAATTTAGGCAATGACGATAAGGACAAATTTGCTCCCAATTTGAAAGAAATGACCCCATTAATAATAGAAAA ACTAGAGAGCAACGCCCATGTTACAGAACCTCCAGCACGCTTCTGAAGCGAGCTTGAATAAGTTTAGAAAAATTT AGGCATAGGCAAGGCCAGCACCTACGCCCAACGATTTCCCTTTTACAAACAGAGACTACATCAAGGTAGAAAAAA AGCAAAATCAGTGCTTTAGAGAGCGCTTTAAGGTGATAGAAATTTAGAAAGCATTTTGAAGAAATCGTGGATTCCA AATTCAGCGCTTCTTTAGAAAGAAATTTGGACAATATCGCTCAAAATAAGCCGACTACCAAGTCTTAAAGGACT TTTACTACCCCTTTATGATAAAATTTGAAGCTGGGAAAGAAATATCATCTCTCAAAAGTGCATGAAAAAACCGGTC AATCATGCCCTAAATGCGGTGGGAATTAAGTCAAAATAAGTCCGTTATGGGAGTTTATCGCTTGCAACAATAC CCTAAATGCAAAATATGTCAAAACAACTGAAAGCGCTAATGATGAAGCGCATCAAGAAATGTGCGGAAAAATGCGGAGG GGAATGGTGCAAAATTCAGCAGAAACGGGCGTTTATAGCTTGCAACAATACCCCTGAATGCAAAACACCAAT CGTTAAAAACACCCCTAACGCAAAAGAAACAATAGAAAGCGGTGAATGCCAGAAATGCGGAGGGGATATTGCTTTA AAAAGGAGTAAGAAA	3200	NKNAQEAHEAIRPTSIIL:EPNALKDYLK PEELRLYTLIKRFLASQMQDALFESQ SVVACEKGEFKASGFKLLFDGYKIL GNDDKDLLPNLKENDPIKLEKESNA HVTPEPPARYSEASLIKV:LESIGIRPST YAPTISLLQNRDYIKVE:KQISALESAFK VIEILEKHFEIVDSKFSASLEELDNI QNKADYQQVLKDFYYPFMDKIEAGKK NIISQKVHEKTGQSCPKCGGELVKNS RYGEFIACNNYPKCKYVKQTESANDEA DQELCEKCGGEMVQKFSRNGAFLACN NYPECKNTKSLKNTPNAKETIEGVKCP ECGGDIALKRSKKGSFYGCNNYPKCN FLSNHKKPINKR
HP0287	3201	CGCCTTTATAGAAAGCGCTTCCATTGAAAAAATGGCCTCTAAATCTCCCCCCCCCTAAAAATCGCTGTGGCGA ATTGGTGGGAGATGAAGAAATTAAGAAATTAAGAAAGCGCTTCTTATTTATCTAAGCCAAACGCTACGCAATCA CCCTCCACCAAAACCCCAATGAATTTTACAGATCTAGTTTACCAATCCTCTTGGAGCGGCTAGAAAGATTTTATCTTA TCAAAACACTAAACGAGTGTTTTACACCGGTGAAACGAATCACCTAATTTCAACCTCTTTGATTACGCCATAGGCTT TGATGAATTGGATTTAATGATCGTTATTGAGAAATGCTTTGATTTATGCCATTTGCACTATAAGCCGAGCTTGT AATGACACCACTGGCCCTACAACTCAAGAGAACAGCCCTTTATGCTTTAAAAAAACCCCTCTCATCAATTTAAAGAA AACCACTTAATTTGCGCAGTAGTGAATGATGAGAGCGATCTTTAAAAAGAGGGTTTGCCAGTTTGTAGCGGAG CAACGCTAACGCTCTATGAGGAACGCTTTTATGACGCTCTAAATCCATAGAGCCAGTTACTGGGGAGGAAGTG TGAGAAACACTTTAGGCTATAAGGTTGAAACAAAGCGAGTTTAAAGCCAAATACAAGTTCAATCTGTTTTGAAA ACTCGCAAGGTTATGGCTATGTAAACCGAAAAATCCTTGATGCGTATTTAGCCATACCATCTTATTATTGGGGA GTCCAGCGGTGGCGAAAGATTTAACCTAAAGTTTGTGAATGTGCATGATTTCAACAACCTTGAAGCGGATTG ATTATATCAAAATACCTGCACAGCACCCAAACGCTTATTAGACATGCTCTATGAAACCCCTTAAACACCCCTGATG GGAAAGCTTACTTTTACCAAGATTGAGTTTAAAAAATCCTAGATTTTAAAAACGATTTTAGAAAAACGATACGATT TATCACAAA	3202	AFIESASIEKMASKPPPPPLKIAVANMW GDEEIKFCKSVLYFILSQRAYATLHQN PNEFSDLVFSNPLGAARKILSYQNTKR VFYTGENSEPNFLFDYAIGFDELDFN DRYLRMPLYAHLHYKAEVLVNDTTAPY KLKDNSLYALKKPSHH:KENHPNLCV VNDESDLLKRGFASFVASNANAPMRN AFYDALNSIEPVTGGGSVRNTLGKVG NKSEFLSQYKFNLCFENSQGYGYVTE KILDAYFSHTPIYWGSPSVAKDFNPKS FVNVDHFNFNDEAIDY:KYLHHPNAYL DMLYENPLNTLDGKAYFYQDLSFKIL DFFKTILENDTIYHKFS:TSFMWEYDLHK PLVSIDDLRVNYDDLVRVNYDRLLQNAS PLLELSQNTTFKIYRKAYQKSLPLLRV RKLVKKLGL
HP0287	3203	AACCCCTAAACCCCTAAACCCGAAGAATACGACTTGAAAAATGACCCCTATTGTTAGCGCAATCTAGCCCC CTAGACAAATCAAGCAAAACCCAAACGGCGGTATATGCGTCTTTTAAAAATTTTAGACATTTCAAAAAACGCTTTG GATAACGCTTAAGAACGCTTTTATCCATGAATTAGAGCAGCCCTTAAACAGCGAACAGCAAAATTTAGCCAAAGAG CTTCTCAATGAGCCTGTGGATAAAAAAGAAAAATTTGAATCCCTATGTCAAGAAATCGCCGATCACACGCTGGGA ATACACCAACGCTGAATTAGTGAATTTCTTATGTTATTAGCCTATGCTGATGGGATTTGGATAGCAAGAAAA AGAATTGTTTTAGATGTGG	3204	NPLNPKTQTEEYDLKNDPYLLAQSSPL DKFKQTQTGAYMRLLKFLDIQKNALDN ALRTLFIHELEQPLNSEQQNLAKELLNE PVDKKEFESLCCQEIADHTHGEYTKRL KLVFLMLLAYADGILDSKEKELFDV

[illegible]

HP0287	3211	GGAGCAGATTTCCGCAATCAGATACCAAAACAGCAACTCAATTATACCCCAAGATAGTGTGTTGACTCATGGCT TTTTTGGATCCAAAACCCGCTTATGCCACAGGCGTTTGGAAATTTCTACCCCGTACGCAAAATACGGCTGGGG TTACTGCGACTTTGAATATTTTATGATATAGGCTTGGCTTGCAGAAACATCCATCATGCTAGGCCAATTAGCGA ATGAAAAGAAATTTAGCGTATAAAAGCTAGAGCAAGAAAAGACGACAGCTTTACAGAAATCGCTTGATATTGCCA GAGCAAGATTGAATCTTCAAGGCTAGTTGGATGCGGCCAATCTTTCTTTGCCAATATTAAAGAGAAATACGACG CTAATTTAGTGATTCCACCCTATTAAAGGGCTTAACACGCGCTTGTGCGGAAGTGGCTTACAATTTAGCGG TCAATAATTATGAAGTGCAAAAGCCAATTACATTTTCAACAGCGGCATAAAATAGACGACTATGTGCATT	3212	EQISAIRYQNKQLNYYFKIDVFDWLF WIKPAYATGRFGNFYPGQNTAGVT ATLNFDDIGLSLQKQSIMLQLANEKN LAYKLEQEKDEQLYRKSLDIARAKIES SKASLDAANL SFANIKRKYDANLVDFTT YLRGLTTRFDAEVAYNLALNNYEVQKA NYIFNSGHKIDDYVH
HP0287	3213	GAGGCGTGAGCCAAAGTGAGCTGGAAGTGATGCGAGGTTGCAATTCAGGGACAAGATCACTACTGAAGAAATCC AACAACTTTGATTAAACCGCTGTGGATAAGATAGATATTGACACGCTAATTGGAGTTTGTGCGCTCAAGGCTTT TTTTGTATGATTTATACCATAAAGTAAGTGGTTTACAGGTATAGGCATTTGAAGAGATATTTTGAACACGCTGAAGA AAAGGCGCGCATCCTTAAGGCTTTAAGGAAATTTGATCTAGAGTTTAAATAGCCAGATCAAGCCTGAAAGGG ATTTCCAATTCAATTTATTAGGATTAACCTTGATGATCGCTATTGTTAAAGACGCTAACAAACCCCTATTGA ATTGCCCAACACATGTTTATGAGCATTGCGATGTTTTCAGCAAAACGAAACCAACCAATAAATCGCCTTAGA ATTTTATGAAGTTTGAGCAAGTTTGAGCGGATGTCGCGACCCCACTCTAGCGAACGCCGCCACCAACACAC AGCTCAGCTCATGCTATATTGCGAGCACCGCGGATAATTAGGGGATTTTACAGCTATAGGAATGCGCTG TTGTCCAAATACGGCGGAGGATTGGCTGGGATTTTCTTGGTGGCTCTATTGGGAGTTATATTGATGGGCATAA AAATGCGAGCGCTGGCAGCATCCCTTTTAAAAATCGCTAACGATGCGGATGCGGATGATCAATTAGGCACAC GAAAGGCGCGATTGCGGTGATTTGGAAATTTGGCACATTGATGTGATGGAGTTGATTTAAGGAAAAATAGC GGCGATGAAAGCGCAAGAGCGCAT	3214	EGVSQSELEVDARLQFRDKITTEEQ TLIKTAVDKIDIDTPNWSFVASRLFLYDL YHKVSGFTGYRHLKEYFENAEKGRIL KGFKEKFDLEFLNSQIKPERDFQFNLY GIKTLYDRYLLKDANNPIELPQHMF SIAMFLAQNEQEPNKIALEFYEVLKFE AMCATPTLANARTTKHQLSSCYIGSTP DNIEGIFDSYKEMALLSKYGGGIGWDF SLVRSIGSYDGHKNASAGTIPFLKIAND VAIAVDQLGTRKGAIAVYLEWHDVME FIDLRKNSGDERRRRAH
HP0287	3215	ATGTTTTCGCGGACCATGCAAGGGGAGTGCGGAAATCGTGCTGTGAAGCGACTTTCACAAGGCGCTTTGCCG GCGTTTGTGATTTAGGTTAGCTAATAGCTCTATCAAGAGCCAAACAGCGGTTCAATCGGCTTACAAAATAAC GATTTACATTTCCGCGCTTAAATCAACATCAACCTTCCCGCTCAGATTTGCCATAATCCGGAGTCAATTTGATT TGCTATCGCTCTTTAATCGCTTTCAGAAACAGAGTTGGCTTTAAGAGTGGTTTGGTGGGAGTTAGGGC TTGATGGCAAGATCAACCCATCTCAACATTTCCCGCTTATAGACATTTGCCATTAAACACCCCATGCTAAGA TCATTGCGCTAAGGCCAATGAAGAGCTTTTTCGCTATCCCTAATTTGCAATGCTTTTGTGGGCAATTTAAAGA AGCGTTAGAAATCTTGCAAAACCTGAAACCAAGCAGACACCCACAGAAACCTACCCCTTTAAACGATAGAAAT GAACGATAAGAGATTATTTTTCAGACGCTATGCTTAGATTTTAAAGAGTTAAGGGCAAGCTGCTGCTAAAGA GGCGCTTTGATCGCTAGCGCTGGGTTTCATACTTGAATTTAGAGGGAAGTCCAGGGTGTGGGAAAGCATGATC ATTAATCGCATGCGTTATATCTTGCCTCCATTAGCCTGAATGAATCCTAGAGCGACAAATACGCAATTTTAAGC GAGCAAGACAGTGCCTATTACCCCTTAAGGAGTTTGAACCCCTCACCAAGCGCTTCAAAATCCAGTATTTTAGGC TCAAGCTCTCTAAGAGAGCCAAACCTGGCGAAA	3216	MFCATMQRGVAEIVAEATFTRALPAF VISGLANSSIQEAKQRVQSALQNNDFT FPPLKITINLSPDLPKSGSHFDLPIALLI ALQKQELAFKEWFAFGELGLDGKIKPN PNIFPMLLDIAIKHPHAKIAPKANEELFS LIPNLQCFVGHFKEALEILQNPETKAD THTKKLPFKTIELNDKE'YFSDAYALDF KEVKGQAVAKEAALIASAGFHNLI LEGS PGCGKSMIINRMRYILPPLSLNEILEATK LRILSEQDSAYYPLRSFRNPHQSASKS SILGSSSLREPKEPGE
HP0287	3217	CCAAGAATACCGCGGCTTAAAGACGCATATGCTGAGTCTATCCCTGATTTTAAAGAACTCACCAAGATCAAATCAA AGCCATGCATTTAGAAAAAGCGCTTAGATTGCTCATCAATCAAGCCTTATTGAGAAATCTCGCTTTAGATTTAGG GCTTGGCGCTACAAAGCAAGAGTGGCGAAAGAGATCAGAAAAAGAGCGTTTCCAAAAAGATGGCGTTTGTATG AAGAAATTGTATAAAATATCTTAAAGCAAGCCATTACCGCCCAACATTTGAAGAAAGCGTTGAAGGCTTTTAAAT CCTTCAAAAAATCAGCACTCTATTCCCAAAACCACTACCCCTTTGGAGCAATCAGCCTATCGCTTTGGGCAAAAT GCAAGACAAATTAGACATCTTATCCTAAACCTTAGTGTGTTAAATCTCTTAAATGAAGAGAGATGAAAAATAT TACGAGTCCCATAAAGGATTTTAAAGCCCAAGGCTTAAACACGCTCTTTATATTGACGCTAGTTTGGAA AAACCTGATTTGAAGGAGTTGGAGGAATACCTACATAAAACAGGTGTCTATTGGACAAAGAGGGGAAATGCA GGATTTTAAAGCGTTCAAGAGCAAGTCAAGCATGATTTAAGCATGCAAAAAGCGAATGAAAAAGCCTTAAGGAGCT ATATCGCTCTAAAAAAGCGAAGCGCAAACTACACCAACAGATTTT	3218	QEYRLKDAYAESIPDFKELTKDQIKA MHLEKSALDSLINQALLRNIALDLGLGA TKQEVAKAIRKTSVFQK'DGVFDEELYK NILKQSHYRPHKHFEEVERLLILQKISTL FPKTTTPLEQSSLSLWAKLQDKLDIL NPSDVKISLNEEEMKKY'YESHKKDFKK PTSFKTRSLYFDASLEK'PDLKELEY HKNKYSYLDKEGLQDFKSVQEYVQH DLSMQKANEKALRSYIALKKANAQNT TQDF

HP0287	3219	AGCGTTTGCCAAAGCAGCGATTAAACATGTGCGAATATAAAGATTAGTGCATGAAGCCAATGAAGATTATGA ACATTTTGGGCGGATTAGCCAAAGCAGAACTCACATGGTTTAAACCTTTTGATAAGGTTTAAACAGCGATAACGC CCCTTTTCAATGGTTGAAACCGCAAAATCAATGTTTCTTACAATTGCATAGACAGGCATTTAAAGACAAAAA AATAAGTGGCGATCAATTTGAAGGGAATGGGGATTATAATGTCACTACATCAGAACTCCACTCTGAAGTC AATAAACAGCCAACTTTAAACACGAATCAATGTCAAAAAGCGATAGGTCATTATCTATATGCCCATGATT GTAGAAAGCGTTTATATGCTCGCATGCATGCACTAGGATTGGAGCGCATCCATAGCATCGTTTGTCTGGTTAGCCC TGAAGCCTTAAGGATAGGATCAACGACGCTCAAGCTAAATTAGTTATCACAGCGGATGGACTTTTAGAAAAGGCA AACCTTACATGCTCAAGCCAGCCCTTGACAAGGCTCTAGAAAATAACGCCCTGCCCTAGCGTGGAAAAGCGCTCAT GTGATACGAAACGCCAAAGAGATTGACTATGTGAGAGGGCGGATTTGTCTATAATGAAATGGTCAATTACCAATC CGAATAATGCGAACCTGAAATGATGGACTCTGAAGATCCTTTATCTGCTC	3220	AFKAQARIKNCMEYKDLVHEANEDYE HFWGDLAKQKLTWFKPFDKVLNSDNA PFFKWFENGKINVSYNCDIRHLKOKKN KVAIFEGEMGDYNVITYRKLHSEVNKT ANLLKNEFNVKGDRIYIYMPMIVESVY MMLACTRIGAIHSIVFAGFSPEALRDR NDAQAKLVITADGTRFKGKPYMLKPAL DKALENNACPSVEKALIVIRNAKEIDYV RGRDFVYNEMVNYQSDKCEPEMMDS EDPLFL
HP0287	3221	GAAACCGCATGCAAAAAATATGGGTGGGGTATTTTGGCATGGGAGCGCGAAAAACTCATTAACGCTGAAAAAC CCAATGTGCGTTTAAATGACATGGCAGGCAATGAAGAAGCCAAAGAGGAGTGGTAGAAATCGTAGATTCTTAAAT ACCGTGAACGATACGCCAATTTAGGGGCTAAATCCCTAAAGCGGTATTAGTAGGGCTCCAGGAACCGGTAA ACCTTTTAGCCAAAGCGGTAGCGGGAAGCGCATGTGCCGTTTCTCTATGGAGGGAGCAGTTTCATTGAAT GTTTGTGGCTTAGGGCAAGCAGGTTAGGATTTATTTGAACCGCTAAACAAAGCCCTAGCATCATTTTTA TTGATGAAATTGATGCCATAGGTAAAGAGCGGAGCGGTGGAGCGGTGTGAGCGGAACGATGAAAGAGAGCAAA CCTTAAACCAAGCTCTAGCCGAAATGGATGTTTTGGAGCGGAAATGCCCTGTATTGTCTTAGCCGCAACGAAC CGCCCGAAATCTTAGATCGGGCTTAATGCGTCCAGGGCTTTGACAGGCGGTTTAGTGATAAGCCTGATTT TAATGTTAGGTAGAAATCTTAAAGTGCATATTAAAGCGTGAACTTGTCTAATGATGTGAATTTGCAAGAAGTCGC CAACTCACTGCAGGCTTGCAAGAGCGGATTGGCGAATATTCAATGAAGCCGCACTTTAGCAGGAAGAAACA ACCAAAAGAAAGTCAGGCAACCAATTAAGAAGCGGTTGAAGAGGATTGCAGGTTAGAAAGAAAGAGCAG GCGCATCAGTCTTAAAGAAAGAAATCGTCCCTACCATGAAAGCGGCGATGCCGTGATTTCTGAAATGACTAAAG GGAGTGTAGGTGAATAAGTCTCTATCATTTCCAAAGGGCGATGGCGGCTTTGGGCTACACCCCTTAAACACGCTGA AGAAAACAAATACTTGATGCAAAAG	3222	NRMQNMGGGIFGMGSAKKLINAEP NVRFNDMAGNEEAKKEEVWEIVDFLKYP ERYANLGAKIPKGVLLVGPPTGKTLL AKAVAGEAHVPFFSMGSSFIEMFVGL GASRVRLFETAKKQAPSIFIDEIDAIG KSRAAGGVSGNDEREQTLNQLLAEM DGFGENAPVIVLAATNRPEILDPALM RPGFRDQVLVDKPDFNNGRVEILKVHI KGVKLANDVNQEVAKLTAGLAGADLA NIINEAALLAGRNQKEVRQQHLKEAV ERGIAGLEKSRISPKEKIVAYHESG HAVISEMTKGSARVNKVSIIIPRGMAAL GYTLNTPPEENKYLQKHHELIAEIDVLLG GRAAEDVFLEEISTGASNDLERATDIK GMVSYYGMSVSVGLMVLEKQRNAFLG GGYGSSREFSEKTAEEEMDLFIKNLEE RYKHVKQTLSDYREAIEIMVKELFQKEV ITGERVREISEYEVANNLESRLPLEEQ AS
HP0287	3223	GATCTAGACTATCGGATCGTCAAGCGGAAAGATTAAACCAAGCTTTACCACAGCGGGAGCGCAAAAGAGAACGG ACATGAACGAAGAGCAGATTAAAGCATTTGCTGAAATTTTGATCCTAAAGATATTTGGTAGCGGAGGTTTGAAG ATTTACCGATCTTACATGACGGGCAAGTATCGCAGGAACCAACAGATCCAAAGGCATGCTAAACTTCACGCT AAAGCCGTTTTCTTACGAGAGCGGATCAAGGAATACATACATAGACTTAAACCGGACGAGTTGTAGTGAG AGTGCCACACAGCGCTTAAACCAACCGAGATCAACAAATTTAGCGGCTTCAATCAAGGACGCTTCAATAGCG AAAGCGATCACGCTATAGCGGTTTTAAGCCACTATGAAGCCAAAGTTAAAGAAATTAGACCAAAATTAGACGCTGATA GCATCTACTCATTAACAAACATTTGCTAAATTTGAATTTGATAAGGCTACGCATCCTAATGTAACCGATAGTAA TTTAGCGTTGCTGATTTAACATGCCACGAACCAACGCAAGGATAGAACTACTCAACCGCTGGAAAAAGAAAT TTCCAAACGACATTAAAGCTATGAAGATGAAGATTAACGCTTATTAAAGCGATATTATGATCGCAGTTTGCAGATTTAAGAAAT CGATCTGAACCTCCCTAAGGTAGTTTAAACGCTTATTAAAGCGATATTATGATCGCAGTTTGCAGATTTAAGAAAT TACCAAGCAGCAGCGAGCGCTGAAAGATTGAGCGGAAATTTATATAACGAGTTCTGTTAGAGATGTTTGA GAGCGATCAAGCAGCGGATATTAGCGGATTTAGGAGGAGCGGATCGCAGATTGACGATTTGATGATCGG AGCAAGCGTTATTGAAGCCTTAAAGCGGATGAACATTAAAAAGGCTTGAAGATTACAAGATCGCAGATGTTACT	3224	DLDYAVKAKDLKPSFTTGGTQKRTDM NEEQIKSIAENFDPKKIFGSGGFEDLP LHDGQVIAGNHRIQGMNLNFTPKSRFSY ERAIKEYYHIDLKPDDELLVRVPHKRLNN TEINLAASSNQGRFNSESDHAIIVLS HYEAKLKELDQKLDADSIYSLKNIVAKN LNFDKATHPNVTDNLALLMFMNPRTK TQGIELLNRWKKEFSNDIKSYEKVKKM FVDNAGSFHNLJHDLNFPKVSNAAYLS DIMDRSFANLKNYQSTSESLKDLSEKF YKTSSEMFEKSDQSTSDISEILGGAIA RFARFDDPSKALFEALRSDNIKGLKD YKIADVT

HP0287	3225	CGATTTGACAAACAAACCAATAAGATTTTGAATCCTTGGGATAAAGTGAGCGGCTAAAGACAAATGTGATAACCGCA TCAGGGAATGCGATCTTATTGAATATGATGTGATATCTAGCGGACAAGGTGCGTTATGACACTAAACCAAGAA GCGTTATTAGAGGGGAATATCAAGGTTTATAGGGCGAGGTTTCTGCTTAAACCGGATTACGTGAAATTGAGTTT GAATGAAAAATATGAATCATTTTCCCTTTTATGTCCAAGACA	3226	RFDKQNHKIFEILADKVSADNVITASG NAILNYDVYLADKVRDYDTKTKEALLE GNIKVYRGEGLLVKT DYVK _SLNEKYEI JFPFYVQD
HP0287	3227	ATCCAACCTGATTATATTCTACGCATAGCGAATCAGCCCTAGACTTGCTCAAGTTATTGAAAAAACCCAGATGAA TGCAAGCGCGATTGAGATCGCTCACTGCTCCTCAATCAAGATGATGATCTGAAGCTAAAGAGCAAGCGCTTTATG ATTTAGGAGCGTTGTATGCAAGGATCAAGGACTTTAAAAAGCCCACTTTACAATCTGCAATATTTGCAGGACCATG CGGAATGGATAAGCTTCTGCTGTTAGGGCGCGGATGAAAAAGCCCTTTTCCATGGAGGGGAACACGCAAGA AAAAATCGCCCACTATGACAAAATCATTCAAAATTTCCCTAATCTAATGAAGCCCTAAAGGCTTTAGAAATTGAAAGCC CAACTATTGTTGAAAAACAAGCGTTATGCTGAAGTGTTAAGCATGCAAAAAAATTTGCCTAAAGATTCCTCTTATGATCC AAAAACGCTCAATGCTTGTCTAAACCCCATTAGAGAACCATCGTTGTGAAGAAGCCCTTAAATATTTATCCCAA TCACAACCTTTGAATTCAG	3228	SNPDYISTHSESALDLLKLLKKNQMNA SAIEIAHLNQQDDDLKAKEJALYDLGA LYARIKDFKNAHLNLYLQYLCIDHAELDK ASVVRARDEKALFSMEGN"QEKIAHYD KIQNFPNSNEALKALELKAQILLFENKR YAEVLSMQKNLPKDSPLIQIKTLNLAK TPLENHRCEEALKYLSQITTFEF
HP0287	3229	AAAAAGAGCATCGCCCTAACAAAAACCAAAACCAACCAACCAACCAACCAACCAACCAACCAACCAACCAACCA AGAAGATTGGATAGCAACAAAGTAGAGGGGCTTACGGAAATTTGCGATGTAATGAGAGGAGGACTTTAGGCTTTC ATAAGGAGTTAAAAAGGCGTTGAAGCGAATAACAAGATCCAAAGTGAGCATTTAAACCCGCAATTATAAGATGAAC TTAACTCTAAAGCGAGCGTTAAATACGCTTTAGGGGCTTGGTGAGATTGGGGGAACATGATGGTCAATTGA AACCCCAAAAGCGGATCGTGATTGATCGGGCATGAGCTTCCCTAAAGAGGGGCTCTTTGGCGTGATATTTTAA TCCCGGATTTTCCCTACTTGACCAAAATCAAGGACAAATCGCTGGCATTATCATCACCCCATGCCATGAAGATCACA TAGGGGCCACGCTTATTGTTTAAAGAGCTGCAATTCCTCTTATGGCAGCCCTTGGATTGGGGCTGATTGGG AGCAAGTTTATGATGAACATGTTTGAATAATACCGCTCGTATTTTAAATCGTAGAAAGCGCTGCCCATTAGCGTG GGCGAATTTATCATTTGAATGGATCCACATCAGCATCTCATTTGACAGCAGCGCTTTAGCGATCCAAACTAAAGCC GGAACGATCATCCACCGCGGATTTTAAATCGATCAGACCCCGTGATTTTGGCCACGGATTGTATCGTTT AGCGCACTATGGCGAAAGGGGTGATGCTTCTTTAAGCGATTCCACCACTCCCAATAATCCGGGACTACGCCG AGTGAAAGCACCATAGCGCGGCTTTGATACCTTTTAAAGAGCGCAAGGAGGTGATTATGAGCACCTTCTC TAGCAATATCCACCGGCTCTATCAAGCCATACAAATACGGCATTAAATACAAACCGCAAGATCGCTGTGATCGGCGCT CTATGGAAAAAACCTAGACA	3230	KKHEHPNKKPNHNNHKKQKHAKTRNYAQ EELDSNKVEGVTEILHVNERGTLGFHK ELKKGVEANNKIQVEHLNPIHYKMNLS KASVKITPLGGLGEIGGNMMVIETPKSA IVIDAGMSFPKEGLFGVDILPDFSYLHQ IKDKIAGIITHAHEDHIGATPYLFKELQF PLYGTPLSLGLIGSKFDEHGLKKYRSY FKIVEKRCPISVGEFIEWIIHSHIDSSA LAIQTKAGTIHTGDFKIDHTPVDNLPTD LYRLAHYGEKGVMLLLSDSTNSHKSGT TPSESTIAPAFDTLFKEAQGRVIMSTFS SNIHRVYQAIQYGIKYNRKIAVIGRSM KNLDIARELGYIHLPYQSFIEANEVAKY PDNEILVTTSQGETMSAL
HP0287	3231	GACAACGCCCCCTATTAGACAACACGCCCCCTTAGACAACACCCCTAAATAATCATGATGATCGTTTGGAAAG CGCCGCACCTTTGAGCGGCTTTTAGAAAACTAGAAAAAACTAACGCAAGGTTTTCGCGCTTTGGTGTGGATA AAGAAAAAAAGTTCTGGCCCTAGCGTTTATATGAAGATCAAGGCTATTTTACCTTTAGAAGAGCGCTTATTTTC GCCCTTTCTTTAGAGTTTTCGAAACGCTTTTAAATGTTACAGCATCGCAATCATTTGGCATGATTTTAAAA CCCTTGTTGAGCTTTTAAAGCCAAATACCAAGTGCTTTAGAAAAATTCGATCCAAAGACACTCAAATTTTAGCG TTTTAAAAAATCCGGAAGAGTGGGTTTGATGAAGTTTAAAGGAATATTAAAGAAAGAAATGATTCGCGCATGAA AAATCAAGATTTTAAAGACTAAAGCGGAGAAATTTGAACCTTTTAAAGCGTGAATTAACCGCTTTAAAGCGTTTGTG AATATTTTGAAGGGGGATTGGAAGAAACTTGCCTTCTTTGGCCAGAGAAATTAAGACCGCTTTATGAAAGTTT TAATGGGCATGGAGTTCAAGGCTTTAAGATTGATCGCCCTTATTCAAGCGCTTAGAGCAGGAGTTAAGAATGAAT TGCAATTTTAGAGGGCCAAATTTTGAACATAATTTGGCGTGGATTTAACCTCAATTCGCCCAAGCAACTAGCGAAG TCTTGATGATAAATTAGGGCTTCTTAAACAAACAAAGCCATTCTACCGATGAAAAAGCCTGTTAAAAATCCTAGACAA GCATCCAAAGCATCGCTTGTATTTAGAAATACAGAGAAATGAACAAGCTTTTAAACACTTATACCAACCCCTTATTGCG CCTAAAGACAAAGACGATAAAATCCATACCACTTTTATCCAAACCGGCACAGCTACCGGGCGTTTAAGCTCGCAT CGCCTAATT	3232	DNAPLLDNTPALDNTPKKSCMIVLESA APLSAFLEKLEKTNARVAFRLVLDKEK KVLALAFLEYDQGYFLPLEEALFSPFSL EFLQNAFFKMLQHAQIIGHDLKPLLSFL KAKYQVPLENIRIQDTQILAF LKNPEKV GFDEVLKEYLKEELIPHEKIKDFKTKAE KLELLSVELNALKRLCEYFEKGGLEEN LLSLAREIETPFMKVLMGMEFQGFKID APYFKRLEQEFKNELHVLERQILELIGV DFNLNSPKQLSEVLYDKLGLPKNKS TDEKSLKILDKHPSIALILEYRELNKL NTYTTPLRLKOKDDKIHTTFTGTAT GRLSSHSPNLQNPVRSPPKGLLRKGF ASSKEYCLLGVDSQIELRLLAHFSQD KDLMEAFKGRDIHLETSKALFGEYLA KEKRSIAKSINFGLVYGMGSKLSETLN ISLNEAKSYIEAYFKRFPKIDYLNRMK EEILKTSKAF TLL

HP0287	3233	CGAAACGATGAAATCAAGTGGATGCGATCATGAAAAAGCGAGCCTTTTGTATGAGCAAGGCGCAAAAGATGAAGC TTTGCATTTGTTGACAAAGCCGCTCTTTTCGAAGGATTGCGAGCCATAATTTAGGGTGATTAAGTTAAGGA AAAGGATTTTAAATGGGCGTTGATTTGTTGATTTAGCATCGCTTCTAAAGAAATGCGAGCGTGAGCGGATG ATGCGTTAGTGAGCGCTTATCATTTGCAAGATGAAGATTTGATTTATCATTTCTAAATTTGCGAGAGACACTTTGTA TAAAGACTATAAAAGTCTTTTATCTACGCTTACGCGCTCAATCTATTACGCGGGGAGTATTTTGAAGCCCT TTCGCCCTTAATGCACCTAATTTCAACGCCCTTTTAAAGCCTAATACGCGCTTAGCTCTAAATTTGTTTGTATGTTT AAAGATGAAACGACGCTTACGAGCAATTACAAAAGCGCAACGCGCAAGATGAGCTTGTCTTAGGCTTTTTCGA GGCGGTTTGGCCATTACAAAGCAGGCTTTGGAGCATTTGCAGCATTTATTCACAACTACCCCTAAAGATTTAAACG CTTTGATGGCTTGGAAATGGTGAGTTTGAAGAAAGCGGACACCTTAAAGCGGAGCGCTTAAATTTAGCCAGC CACACCAAGAAAGACACGCTATTAGCCAACTCTTTTACCCCATCAAGCCACGATAAAC	3234	IRNDENQVDAIMKKASLLYEQQKDEA LHLFDKAASFQGGIASHNLGVKFKEKD FNGALDLFDSSIASKENASVSALDVS AYHLQDEDLYHYLKIARDTLYKDYKK SFYSYAYALKSYAGYEYFEALSPLMHP NSNAFLKPNTRLASKLFLMFKDETNAV EQLQKSANAQDELALGLLQARLGHYK QALEHLQHLYLHNPYKDLNLMALVELVS LKKGDTLKASEALKLASHTKEDTLLAN SFYPIKPTIN
HP0287	3235	AAAGATGCTAATGAAGTGATCGTTGAAAAAGCTTTCCACTTTCAAGAGCTTGTGAGCGTGATTACGGCATGGTG TTAAACGCAGAGTGGCTGAAACTTTAGAAGAGGTGGAAGAGCCATTATAAGCATTCCAAACGCTTTGAAATG CAAAAGTGGGCAATCGCTAGGTAGAAACCTTAGCGCTCAAGTGCTTATGATAAGGCCATATCGCTAGCGG TTAAGGCTAAAGACGTGTAGAGTTTGCAGCTCTCGTTCAATTCATTATCTAGCAAGGAGCATTTAGTGCCCTT CAAGCAAAATTAGAGATCGGACGGAGAAAAATCTGCCGATCGAGCTTTTGTCTTCCACGCTCAATTCCTACC CGGTTTAAAGACTTTAGAAAATCAGATTCAATCTCTAAAGAAAACACGAAATTACAGATCGCTAAATCTTGCCTCA AGTGAGTTTGTGGCTCTTATATTATGAAGCAAAACAAATTCGGTGTGTTGAAGACATGATCCCTAGTTGTTGTGGG CGTGGCCGGCGCATGCTTCTTCTCCACAGGGCGCATTCAAAATACCAAGCGAGCAAAATTAGCGGAGTTG CAAGTGAGTAGGCAACAAATCCAGGCTAAAAAAACATGGAATTTATTAGTAAGACTTATAAGAGACGCTTTCT TATTTGAAAGAAATACAAAGCTTGCTTTCTAGCGTGGAATTAGCCAAAGGAAACTTAAACTCCAAAGAGCAGGCTT	3236	KDANEVYRLKLLSTFQELVSVYYGMVL NAEVAETLEEVEKEGHYKHFNALKMQ KVGQIARVETLGAQVAYDKAHIASVKA KDVLEVSQLSFNLSLSSKDDLVPSKLE IRTEKNLPDLFFFVSSTLNSYPVLKLE NQIQISKENTKLQIAKFLPQVFFGSI MKQNNVSFEDMIPSWFVGVAGRMPIL SPTGRIQKYQASKLAELQVSSSEQIAK KNMELLVNKTYKETLSYLKEYKSLSS VELAKENLKLQEQA
HP0287	3237	CACCTTATACAGAGGTTGAACGCCCTTGATGGCTATGAGGTGATTTGAGCGTTCCTTAAACTCCAAAGAGAAAT GAAACCCCTATTGGATAAACTAAAGACAACTCAAGGCTAAAGAAATCCTAGTGGGTATCATTAAACCTAAAGCGG GAAATTTTATCGCTAGCTTCAAGCAAGCGCTTCAATCGATTAAACAGCGGATTTATGAAAGCTTGAATTT GAGCGTTGCTGAAAGGTTTTTGGCCAGGCACGATC	3238	HSYTEVERLDGYEVYLSVPLKLQREIE TLDDTKDKLKAKEILVGINPKSGEILSL ASSKRFNPNAIKTSYESLNLVSAEKV FEPGSTI
HP0975	3239	CATTAGCGGAGTTGAATGGTGGTGAGCAATCTTAATACCAAGCCTTGCAAAAGTGGAATCAACGAAACCAT AAAGTCAAGAAAGTAAAGCTCAAGTCAATAAGCGTTATGGGGGTTTTTACTCAAGACACTTTTTTAGAGCGCTAT GGCATCGCTTAGATGAGCGTTTATTATCACTAAATAGGCGCTCATTTGCCCAAGGCTTGATTTTAAAGCTT GGGATAGGATTTTATGGTGAATTATAAAGCGTGCGTCAACCCAAAGGCTTTAAGAGAGCGTTAAGCGCGC CTAAATGAATTTATTAGCTTTCGTAAAGGCTTTGAATTTTACATTAAAGTCCGTTGAAGTATTGATGAAAAATGACG CTTATGAAATTTCTTCTTGGTTTATCACGCTCTCACGCGGATTTAGGCGCTTTCGCTGAATTTTCTCTACAC TTTGCAATGCGCAATTGGTTTAAATAGCGTGGTGGCTTGGCGTTTCATGCTTTCATAGGAGTTTGAAGAAACA GAATTTCTCAGCGCTAGCGCTAACAGAGCGTTATTGTTGTGGGTTTTTGCACCTTCACTACGCTTTTAA AAATCCCATGCAATTTTATGAATTTTCCAAACGCTATTATTATGCGCTAACATGATCGCGCAAGCCTCTCTCAA AGCTTGAGTAACCTTTCTGACCATGCGCTTCTTTAGATTTTATCTTTAATCATGGTTTTATGCCCTTAGTTTCATCAG CGATTTGAGCCATAATGAATGTCTGTGGCTTTTAAAGCGTTTGAAGGCTTTTTTGAAGCGTGTGTGCTGCTG AATCATCATTTTAGTGATTTAGAAAGTGCATGTGGTGTCTTTAGGGGTGCTTTTGAAGGCTTTTGAAGGCTTTTAA ACCTGGAGGAGCGTTGTGTTATATGCTTAAAGAGTGTCTGCTCTTGGGTTTTTACAAGCCTTTTTTGTGTTGTA GGGTTTT	3240	LAEFWVSVNLKYQSLAKVEIKRNHKV KEVTLKVNKRYGGFLKDTFLERYGIAL DERFIITKIGAHLPKGLDFLKLGDRLWV NYKSVASNPKALREALSAPKIELLVLRK GFEFYIKV

HP0975	3241	CAAACTTAAACGCCAACCCCTTATTTGAATGTTTGTAGGAGTTAATCTGGCCAAAGCCAAATATTATTCTAAAA AGAAGAAAGAGAAAGAAAGATGATCTTGAATTTTGTAGATATTGAAATATTCTTTTGAAGCTATCCAAAA CAACCAAGCCTGATTTTAAAAATAAAGACGAGCTTTTAGGGATTATCTTAATCTTAAAAATTAGATTCTTTAAGAG AAGTGAGGGAAGACTTTTGAAGAGCGGTTTAAAGAAATGATGAAGCGATTGGGAGCGTATGTGTAGTGTGCTT AGCTGTAAGTATTTGAGAGCGGTGTTGAAAAAGTTCAAGAAATGGCTAGATTTTATCGCTAGGCTTATGCTTTGAGA GGC	3242	NLNAPKPLFEFCFVGVNLAkakYYSKKE EREKEKMILNFCCKIFEILFEAIQKQPKP DFKNKDELLGDYPNLKNDLSREVRECU FLKRAFKNDEASLGAYVLVLLSCKYFE SVFEKVQEWLDFIARLIALRG
HP0975	3243	CCCTGAGGATAACTCCATAGAAATATCTCTAGCGATAGCGCTTGGAGAACTAATCTTGTGCGGACTAATAAAG CCTTGATCAATTCATTTGAGAAATAGCTCAAAAAGACAATTTGCTTCAGCGTATCTAACAGTCAAAATTAGAATACCC ACAAAGACACGAGTCTAGCGTTATTGAAGAGGAGTTAAAAAGAGAGAAAGCAAGCAAGGAGGAGAAAGAAATTGA TTAAGCAAGAAATCTTAACACACAGCCTACATCAATAGATGATGCGGAGCAATGAACAGATTATCAACAAAG AAAAATAAGAGAAAGAAAGCAAAAATATCTTAGATCAAGCAAGGCGCTAGAGACTCAATATGTGCATAATGCGCT TAAAGAAACCCCGTGCCTAGAAACTACAACCTACTACCAAGCGCTGAAAACGCTCTAAACATATTATGCCCTCTG AAATTTTGATGATGGCACATTCACCTATTTTGGTTTCAAAAACATCACTCTCCAACCTGCTATTTTGTGTTCAACCT GATGGAAATTGAGCATGACTGATGCCGCCATTGATCCTAACATGACCAATTCAGGATTGAGATGGTATAGAGTTAA TGAAATTGCAGAAAAATTTAAGCTCATTAAGACAAAAGCCCTGTAAACAGTAATCAATAAAGGCTATGGGAAAAATCC ATTGACAAAAAATTACAAATCAAAAACATGTTGAGCGTGTGATTAAGAAAGCTCCCTCTTGTGTCAGAGATAA ATAAAAAGCGGTTAAGACATGAATGAAGAAACGATAAACTTGAACCTCTAAAAAAGCCCAACAGATTACAC GGCGGTTTTTATGCTGCTTTTACCCCATAAAGCAAGGAGCGCTTAAAAATCGCTAAAAATTTTAAACGCTT TAGCGTATTTGGAAGAAAAACCCCGGTGTTTTTATGAAGCCCGCACCGATTGTTGGAGACTTTAAAGGATTAA ACGATCTGGCTAAAGGCATGCAATTTGTTGCGGCTAAAGAGCTTACCAACTCCACCAACAATATTATTAGGAGAG GTTTCTCAATCATAGAGCGGTTGCAACAAAGCACTATCCAAGGAGTGGTTTTAGTGCTTTTGAATGAGAAAAA AATAGAGCCTTGATGGGCTATCGGCTATTGGAGTTGGATTACCTCTAAATTAAGGCTAAAAATTGAAGCGG TTATGACACAAAAACGCTAAAGAGCTTTATTCAGCGTTTTTGAAGAAAAAATCAATAAAGGGGTTTAGCAT GCAAGCAGTAATTTATGCAAGCAAGTGATTATGCACCTTCTAAACTCTCATCAAGAAAAATTGCAAGAAATCTATCTT TCTAAAGAAATAGACAAGAAACTTTTTTCGCGCTCAAAAAGCATGCCCTAATATCATCAAGTGGATAATAAAAAAG CGCAAGCTTGGCTAAGGGGGGAATCATCAAGGGGTTTTGGCTAAGGTGGAACCTGCCCTTAGCGGTTTCT	3244	PEDNSIELSPSDSAWRTNLWRTNKAL YQFILRIAQKDNFASAYLTVKLEYPQRH EVSSVIEEELKKREEAKRQKELIKQENL NTTAYINRVMMAASNEIJIINKEKIREEKQ KIILDQAKALETQYVHIALKRNVPVPRNY NYYQAPEKRSHIMPSEIFDDGTFTYF GFKNITLQPAIFVVPDIDGKLSMTDAID PNMTNSGLRWYRVNEIAEKFKLIKDKA LVTVINKGYGKNPLTKNYNIKNYGELE VIKKLPLVRDK
HP0975	3245	GGCGGTTTTTATGCTGCTTTTACCCCATAAAGCAAGGAGCGCTTAAAAATCGCTAAAAATTTTAAACGCTT TAGCGTATTTGGAAGAAAAACCCCGGTGTTTTTATGAAGCCCGCACCGATTGTTGGAGACTTTAAAGGATTAA ACGATCTGGCTAAAGGCATGCAATTTGTTGCGGCTAAAGAGCTTACCAACTCCACCAACAATATTATTAGGAGAG GTTTCTCAATCATAGAGCGGTTGCAACAAAGCACTATCCAAGGAGTGGTTTTAGTGCTTTTGAATGAGAAAAA AATAGAGCCTTGATGGGCTATCGGCTATTGGAGTTGGATTACCTCTAAATTAAGGCTAAAAATTGAAGCGG TTATGACACAAAAACGCTAAAGAGCTTTATTCAGCGTTTTTGAAGAAAAAATCAATAAAGGGGTTTAGCAT GCAAGCAGTAATTTATGCAAGCAAGTGATTATGCACCTTCTAAACTCTCATCAAGAAAAATTGCAAGAAATCTATCTT TCTAAAGAAATAGACAAGAAACTTTTTTCGCGCTCAAAAAGCATGCCCTAATATCATCAAGTGGATAATAAAAAAG CGCAAGCTTGGCTAAGGGGGGAATCATCAAGGGGTTTTGGCTAAGGTGGAACCTGCCCTTAGCGGTTTCT	3246	RFFYAGFLPHKSKERRLKIKNALAY LEEKTPVVFYESPHRILETLKDLNDLAK GMHLFAAKELTKLHQYYLGEVSQIIE RLQOSTIQGEWVLVLNEKIEPCMG SALLELDLPPKIAKIEAVMTQKNAKEL YFQRLLEKNQ
HP0975	3247	CATTTGAAGCTGTAATCGGGCTAGAAGTCCATGTCCAACCTCAACACCAAAACCAAAATCTTTTGCTTGTCTACAA GCTTTGGAGAAATCCCTAATCTAACACCTGCCCTGTGTGTTGGGTTTACCGGGAGCTTTCGCGGATTGAATAAA GAAGTGGTTAAAAAGCCATCCAATTAGGCACAGCCATTGAAGCCCAATATCAACCAATATTCTATTTTTCGAGGAAA AATATTTTACCCTGATTTGCCCTAAGGCTTATCAAAATTCGAGTTTGAAGTCCCTATTGTGAGCGATGGGAAATTAG AGATTGACACTAAAGAGGGTGCAAAAATCGTGCGTATTGAAGGGCCACATGGAAGAAAGACGCCGGTAAAAATAT CCATGAGGCGAGTTATCTTATGTGATTGAACCGCGCTTGACCCCTTTATTAGAAATTTGTCAGTAAGCCGGACAT GCGAAATAGTGAAGAGCTATAGCGTATTTGAAAAAGCTCCATGCTATCGTGGTTTTATAGGATTCTGATGCGAA CATGCAAGAGGGGAATTCAGGTGCGATGCGAACGTGCCATTAGACCCCAAGGCGATGAAAAGCTTTTATACGAGA GTAGAGATTAAAAATCTAAATAGCTTTAGATTCATTGCTAAAGCGATTGAATACGAGATAGAGCGCCAAAGCGCGG GTGGGAGAACGGGCTATAATGAAGAGGTGTTCAAGAAACGCGCTTTTGACACCCCATAAAGGGATCACCCCTT TCTATGCGCAATAAAGAAAGATCAGCGGATTACCGCTATTTTAAAGATCCGGATTGTATCCTGTTTTATTGATGAAA AACTTTTAAAGAGCTCAAAAGATCAATGAATTGCCTAGCGGAAAAAATCCGCTACATGAAGATTTTAAACCTTAA AGAAAGACGATGCGAATTTATTGTTGAGCGATCCTTATTGGCGCAGTATTTTGAAGAGCATGCTCCATCTTGGGGTTAA GGCTAAAAACGAGCGT	3248	FEAVIGLEHVQLNTRTKIFCSCSTSG ESPNSNTCPVCLGLPGALPVLNKEVVK KAIQLGTAIEANINQY3IFARKNYFYD PKAYQISQFEVPIVSDGKLEIDTKEGAKI VRIERAHMEEDAGKNIHEGSYSLVDLN RACTPLLEIVSKPDMFRNSEEAIYLLKL HAIVRFIGISDANMQEGNFRCDANVSIR PKGDEKLYTRVEIKNLNSFRFIAKAEY EIERQSAAWENGRYNEEVWQETRLFD THKGITLSMRNKEESADYRYFKDPDLY PVFIDEKLLKEAQKINELPSAKKIRYMK DFNLKEDDANLLVSDPLLAQYFESMLH LGVKAKTSVTWLCVEILLRLKAEITLEN CGVSTHMLGALAKRIDEKGISGKSAKD VLDKLEEQG

HP0975	3249	TGGCTATGGCGAGCATTTTATACCAATGAAGAGACTTTAGTGGTGTCTAGCTAGGGTATGCAGACGGGTAA TGCGCGCTTTAGGCAATCGCATTCAGTAGCGATCAATAACCAATTAGCCCCCTGATTGGCAAGGTGTCATGGAT CAATGTTTTGTCAAACCTCAATAATTCAAGCCAAAGAGGGCGATGAGGTCAATTTGTTGGGATAAAAGCGCTAAG GCTAATGACGCGAGCGAAATCGTGGCTTTTAAACACCATTCCTTGAACCATAGCACCTATCCAAACGCTT GGAGCGGTXTATATTAAATCAACCATGCAAAATTTTATTTGTGTAGATGTTGAAAAAATTCAGGXTTAAAA TATAAATGAAAAAAGTTTATTTTGTGTAATAAGCTTTTGGGGTTTTTGAACGCTTCTAGCTTGTATGAAAA ACTGATTAATAAGAAACGATCAGCGTTGGCACAGAAGGCATTTACCCCCCTTACCTTACCACAATAAAGAGGCAA GCTCACCGGCTATGATGTGGAAGTGGCTAGGGAGTTGGCCAAAGAGCTTGGCGTGAAGATCAAAATCCACGAACT TCATGGGATATCATGCTGACAGGTTTGAATCGGGGC	3250	GYGEHFTNEETLVGLALGYADGLM RALGNRIQVAINNQLAPLIGKVCMDQC FVKLNIIQAKEGDEVILFGDKSAKAND ASEIXALLNTIAYETISTLSKRLERYI
HP0975	3251	GGGGCATGTGATCGGTAAAGAGGGCAAAATGGTGAGCGCGATTAAAGCGTTATTTCTGGTGTGAAGCCAAAGAC GGGTTTTCTTATAAATCGTTGTTTTGCTAGTAAACGGCGATAAAATCCCCATGTTTTAGGCGATCAAACGCCTT GAATGGTTCTATGCTTTAGTGGCGAGAATTGTTAAAGCGTGGGCTTAATGGGGGTTAAGGCTTCATTTAGAG AGCGATTTCCGGAGTGCTTAAAAAAGCGTTAAGGTAGTGTGCTCCCTTGAACGCTTCTCTCGGTTCTTCT TTTAAAGATATATAATCCATTCTTGAACATGCTAAAAACCTGTTGTTTAGAAACGATCCAAACGCTGAAAGG CTAAAGAGCTGACTAATTTAGGGCTTTTATGAGCGAAGCAGAGCAAGAACTCTGTGTTTAAAGAGGGGAG TTTTTTTATGCGATTTAGTAGGGCTTAGCGTGTGAAGAAACGAGATTCTAGGAAAGTATAGAAATCCAAAG ATTTCTCAACAGATTATTTCTGTTGAAACCGCTGAACCTGTTGAAAGGTTTGGCTAAGATTTTTTAAATCC CTTAGGGATTTTATATCCAAAGAAATCCTTTTGAAGACAAAAAATAACC	3252	GHVIGKEGKMVSAIKAFISGVKAKDGF SYKIVVFASKNGDKNPHVLGDQTP
HP0975	3253	CAAAGAATATGCTATCCACTACACACAGACCATTCCTCAACGAGTCTCATCAGTTACCAATATTGGGAAGACAGCTC CAGCGTTACGATCAACGCTTTTTCACCAACCGAGATGAAATGAGACTTCCACACGGAAATGGCGACCTTATTTT GTCTAATAACATCTTTTACGATCTATTATGGGACTTTAGAAATCTTTGATTCTATCAAAAAAAGGTTTGGCTAGC CCTAAAAAATTTGAAGACGGGTTTGATATTCTAACTAAATCTTTGAAGTGTATTTGAAAAAGGCGTAGAATGCCTAG AGTGGATCAACAAACGAGCCTGTTGGCAAAACATCATTTTCAAGAAACTTCTACGCGATGATGATATTTTAG TGCGCTTGTCCTAATTTGCAAGAAATTTAATGTGACTTT	3254	QEYAIHNTDHSQVRVSSVTKYWEDSS SVTINAFFTNQDENETFTHEMATFILSN NILFTIYGTLEIFDSIQKKVLASPKKFE DGFDLTKIFEVYFEKGVCECLEWINKQT SLLRKNIIKFETSTHDDILVRLSNLQEFN VT

HP0975	3255	GGATGTGGATTGTCAAACAGAGTGGCTTGGGAAGAAATTTAGCCCTAAACCATCGCTTTAAGCTTTAGCGCG GATAAATCTTTAACAGTGGCAAGCGGCATTATTATGGGCAAAAGAACGGTTGAAGCGTTAAACCAACCC CCTTTATAGAGTTTAAAGGTGGTAAATCACGCTCACCTTGTCTTTTGCAGCCTAAAGCATGGATAAATCATCA AGAAGACATTACAATCCATCGGTTATTGAACCAAACTAAAGACGCATTATTGCAAAAGCCCTCAAACCTACGCTCT TTTAAAGCCTTTAGAATTGAATGTGAGCATAGCCTCTAGCTTTCTAAATAGGGAATTTGTTGGTAGGGAATTAGAA TCCCTTTGCGTGAAATCCAGCCCAAAACACCCGCTGCTTTAAATAGTGAGAACTTTATTTAAGCTTTTCCAAAAG GCGTTATCGCAAGGATTCATGCGAATTCGTGCTTGAAGCTTTAGCTTGAATGAAAAAGATTGTGAAAAATCG CTCTGGTTTAGAAGAAATCTTAATAAGCTTAAAGCTTAAATTCGCTATAATAAATTTCTTTAAACCGCCCATATCCCCA CAAAACGCTAGAGATGATAGAAAACGACAGAACATCAATTTAAGGAACCTAAGATGAAAAAATCAGCGATCTTA TAGAATGCATTGCGTATGAAAAAAATTTGCTAAAGAGATGATTTCAAAAGTGATCAAGGCTGTTTGTAAAAATGG CGCAAAATGAGTTAGACCCCTAGCACGCTACTTGGTGGTTGAAGAAACAGCAGCTCCAGCTTATCCAGTTGGTA GAAGTTTAGAAGATGGTGATGAAAGATTGGTTAACGACCCCTCTAAATACATCAGCCTGTCTAAAGCCAAAGAAATG GATCCAAAGCGTTAAGATTAAAGACGAATTGTCTATAGCTTGAGTTGGAGAGCATGAAACAAGGAGCGATCAACCG CCTTTTAA	3256	DVDLSNRVALEEILAKPSLLSFSADKF FNSAQAGIMGQKERVEALKNHPLYRV LRVGKITLTLFCSLKAWINHQEDITHA LLNQTKDALLQKALKLYALKPLELNV IASSFSKIGNLFGRELESFCVKIQPKNT RALNSEKLYLKLQKGVARIISCEFCF EVFSLNEKDFEKIALVLEEILNKA
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TABLE 3

1SA1_HP0001	CUACUACUACTCAATTCAAGGGTTTTTGAG	(SEQ ID NO. 3265)
1SA2_HP0002	CUACUACUATTTTAACCCCTTGAGAGTTTGG	(SEQ ID NO. 3266)
1SA3_HP0003	CUACUACUATTCCTTTTAAATAAATTTTGG	(SEQ ID NO. 3267)
1SA4_HP0004	CUACUACUAGGGGTTTTTGTGTTTAGAAGTT	(SEQ ID NO. 3268)
1SA5_HP0005	CUACUACUATTAACAATCCCTTTAAAGCTC	(SEQ ID NO. 3269)
1SA6_HP0006	CUACUACUAAAACACTACACCCATAAATTATC	(SEQ ID NO. 3270)
1SA7_HP0007	CUACUACUATCAGCTGGTAGAGCAATTCCC	(SEQ ID NO. 3271)
1SA8_HP0008	CUACUACUACTAATAAGATTTGTTAGATCT	(SEQ ID NO. 3272)
1SA9_HP0010	CUACUACUAGGGGCTTACATCATGCCACCC	(SEQ ID NO. 3273)
1SA10_HP0011	CUACUACUAAAATAATGTTTTTAGTGTTTT	(SEQ ID NO. 3274)
1SA11_HP0012	CUACUACUAAATCTTTTTCATATGGCGACTA	(SEQ ID NO. 3275)
1SA12_HP0013	CUACUACUATTCAGCGAACAATATTCCC	(SEQ ID NO. 3276)
1SB1_HP0014	CUACUACUACTATTCTACGATTTGATAGAC	(SEQ ID NO. 3277)
1SB2_HP0015	CUACUACUAAAATCATTAATAAAATTTCCATA	(SEQ ID NO. 3278)
1SB3_HP0016	CUACUACUAAACATTTCTACGCTCTATAACAT	(SEQ ID NO. 3279)
1SB4_HP0017	CUACUACUACTAGCTCCTCAAAAAGTTTCTC	(SEQ ID NO. 3280)
1SB5_HP0018	CUACUACUATGAATCATTTTAAACGACTC	(SEQ ID NO. 3281)
1SB6_HP0019	CUACUACUATCATGCTAATTTCCAAAAATTG	(SEQ ID NO. 3282)
1SB7_HP0020	CUACUACUATTAGTTTCTGTGTTTTTATAGTC	(SEQ ID NO. 3283)
1SB8_HP0021	CUACUACUATTAAGGCTTTTGGGGCTTGT	(SEQ ID NO. 3284)
1SB9_HP0022	CUACUACUATGTATTGTTTACTCTTTTGT	(SEQ ID NO. 3285)
1SB10_HP0023	CUACUACUATTATTGGATTGCCCCATAT	(SEQ ID NO. 3286)
1SB11_HP0024	CUACUACUATTAGCGTTTCATCAAAAACAC	(SEQ ID NO. 3287)
1SB12_HP0025	CUACUACUACTTTTAGTAAGCAAAACACATA	(SEQ ID NO. 3288)
1SC1_HP0026	CUACUACUAAAGCCTTAATCCCCTACATAGA	(SEQ ID NO. 3289)
1SC2_HP0027	CUACUACUAGCTCTTTTCACATGTTTCAAT	(SEQ ID NO. 3290)
1SC3_HP0028	CUACUACUATTAATGAGCTTTGCTCTTAAA	(SEQ ID NO. 3291)
1SC4_HP0029	CUACUACUACGTTCTGTGTTGCACTTTATTT	(SEQ ID NO. 3292)
1SC5_HP0030	CUACUACUAAATGGTTTAACTTTTAAAGTGG	(SEQ ID NO. 3293)

1SC6_HP0031	CUACUACUACTACTTGGGATCACAACAGG	(SEQ ID NO. 3294)
1SC7_HP0032	CUACUACUATATTTATCTCTTCTACCAA	(SEQ ID NO. 3295)
1SC8_HP0033	CUACUACUATCAAAAGTCATTTCTTTCAC	(SEQ ID NO. 3296)
1SC9_HP0034	CUACUACUAAATCCATCTCTAACCCTTTTCT	(SEQ ID NO. 3297)
1SC10_HP0035S34	CUACUACUATGAAACATCACAATTTAGCAA	(SEQ ID NO. 3298)
1SC11_HP0036S35	CUACUACUAACTTCAACGGACTTTAATGTA	(SEQ ID NO. 3299)
1SC12_HP0037S36	CUACUACUATTTAAATTTTCATTTTGTGTAT	(SEQ ID NO. 3300)
1SD1_HP0038S37	CUACUACUAGCATCAATCACCCCTATTAGT	(SEQ ID NO. 3301)
1SD2_HP0039S38	CUACUACUACTAATGGGTTTGGAAAAAAC	(SEQ ID NO. 3302)
1SD3_HP0040S39	CUACUACUACACTTATTCATCTTTAGCCTT	(SEQ ID NO. 3303)
1SD4_HP0041S40	CUACUACUAAATGCGAGCGGCTAGTAAATCC	(SEQ ID NO. 3304)
1SD5_HP0042S41	CUACUACUATGAGTCACTTCAAAAACCTCAG	(SEQ ID NO. 3305)
1SD6_HP0043S42	CUACUACUATTTATTAGCGGTTTGTGATTTT	(SEQ ID NO. 3306)
1SD7_HP0044S43	CUACUACUAAATAATCTCATTCATAAAAATT	(SEQ ID NO. 3307)
1SD8_HP0045S44	CUACUACUATTTCAAACTCTAAAAGCTTCA	(SEQ ID NO. 3308)
1SD9_HP0046S45	CUACUACUAAAGTTTGTTTTAAATGCAAAGA	(SEQ ID NO. 3309)
1SD10_HP0047S46	CUACUACUATTAACAATACTTAGGCAATAA	(SEQ ID NO. 3310)
1SD11_HP0048S47	CUACUACUATTTATCTCTTTTGTGATGATTG	(SEQ ID NO. 3311)
1SD12_HP0049S48	CUACUACUATCAATAAAGTTGCATCGTTAC	(SEQ ID NO. 3312)
1SE1_HP0050S49	CUACUACUAAAATAGCGGTTTTTAAACACAGAT	(SEQ ID NO. 3313)
1SE2_HP0051S50	CUACUACUATCATTTTCTTAAAGCTTTTAA	(SEQ ID NO. 3314)
1SE3_HP0052S51	CUACUACUAAAGTAGGGCAAAGTTTAGCAAG	(SEQ ID NO. 3315)
1SE4_HP0053S52	CUACUACUAACTTATTAATAATTTAGCTTG	(SEQ ID NO. 3316)
1SE5_HP0054S53	CUACUACUACTTTTCATAAGCTACTCCTTAA	(SEQ ID NO. 3317)
1SE6_HP0055S54	CUACUACUATTAATGTTTCAAGCTCTCAAT	(SEQ ID NO. 3318)
1SE7_HP0056S55	CUACUACUATTAATTTTTCAGCACAGCATGA	(SEQ ID NO. 3319)
1SE8_HP0057S56	CUACUACUAAATAAACCCCTAGAAATGTAGAA	(SEQ ID NO. 3320)
1SE9_HP0059S57	CUACUACUATTAATGTTTGTGTTGTTTGA	(SEQ ID NO. 3321)
1SE10_HP0060S58	CUACUACUAGTCATCATAATTTTCTGCCT	(SEQ ID NO. 3322)
1SE11_HP0061S59	CUACUACUATTTAAAAAATTTCTTCATCAA	(SEQ ID NO. 3323)
1SE12_HP0062S60	CUACUACUACCCCTTAATAATCTTCCT	(SEQ ID NO. 3324)
1SF1_HP0063S61	CUACUACUAAATTCAGTTCTGAGTTTGCAG	(SEQ ID NO. 3325)

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1SF2_HP0064S62	CUACUACUATTAACCCCTTGATTCCAGTTT	(SEQ ID NO. 3326)
1SF3_HP0065S63	CUACUACUATCAATCATTTTATCCTTAGA	(SEQ ID NO. 3327)
1SF4_HP0066S64	CUACUACUACCCCTTTTGTGACCCCTATAA	(SEQ ID NO. 3328)
1SF5_HP0067S65	CUACUACUATTTCAAACTTTTGGCGTGGTG	(SEQ ID NO. 3329)
1SF6_HP0068S66	CUACUACUAAAGTGTTCATCAATCTTCCAAT	(SEQ ID NO. 3330)
1SF7_HP0069S67	CUACUACUAGAGATTAAATCAAGACATA	(SEQ ID NO. 3331)
1SF8_HP0070S68	CUACUACUATCTTTTCTATTATTACGACCAC	(SEQ ID NO. 3332)
1SF9_HP0071S69	CUACUACUATCACACCCAGTGTGGATAAA	(SEQ ID NO. 3333)
1SF10_HP0072S70	CUACUACUACTCCTAAAAAATCCTAGAAAA	(SEQ ID NO. 3334)
1SF11_HP0073S71	CUACUACUATTACTCCTTAATTGTTTTTAC	(SEQ ID NO. 3335)
1SF12_HP0074S72	CUACUACUATTATGCTTAATTTGTTTGTG	(SEQ ID NO. 3336)
1SG1_HP0075S73	CUACUACUATTAGCACAAATGCCCTTCAAA	(SEQ ID NO. 3337)
1SG2_HP0076S74	CUACUACUAAAACTAAGCGAGAGCGAGAG	(SEQ ID NO. 3338)
1SG3_HP0077S75	CUACUACUAAAGTAATGGTCTTATTCAAACT	(SEQ ID NO. 3339)
1SG4_HP0078S76	CUACUACUAACTTCTCTTATTATTTTTCAT	(SEQ ID NO. 3340)
1SG5_HP0079S77	CUACUACUATTAGAAAGTTGATCATGTAGTT	(SEQ ID NO. 3341)
1SG6_HP0080S78	CUACUACUACTTTGATATTGGGTTAATCT	(SEQ ID NO. 3342)
1SG7_HP0081S79	CUACUACUATTACCTTAAAGAATCATTTT	(SEQ ID NO. 3343)
1SG8_HP0082S80	CUACUACUAAAAATCAAAATTTCTTCCCTGCT	(SEQ ID NO. 3344)
1SG9_HP0083S81	CUACUACUAGATTACCTTTTGGAGAAATGT	(SEQ ID NO. 3345)
1SG10_HP0084S82	CUACUACUATTCTCATTTAGCGTCTCTTTT	(SEQ ID NO. 3346)
1SG11_HP0085S83	CUACUACUACTTTTATTATTGCTCTCTGA	(SEQ ID NO. 3347)
1SG12_HP0086S84	CUACUACUATTAAATTTTCCAATCTTCTG	(SEQ ID NO. 3348)
1SH1_HP0087S85	CUACUACUAAAGAAAAATCAATTCGCATTTA	(SEQ ID NO. 3349)
1SH2_HP0088S86	CUACUACUACATCAAAATGCGCAATAGTTT	(SEQ ID NO. 3350)
1SH3_HP0089S87	CUACUACUACAAACCCTAAAGCTCATCCA	(SEQ ID NO. 3351)
1SH4_HP0090S88	CUACUACUATCACACGTTATCTTCTAAAAA	(SEQ ID NO. 3352)
1SH5_HP0091S89	CUACUACUAAATTACCATTTTGTGCCCTTIG	(SEQ ID NO. 3353)
1SH6_HP0092S90	CUACUACUACTTTATTGTTGTTTAAATCT	(SEQ ID NO. 3354)
1SH7_HP0093S91	CUACUACUACACTTTAAAGCGTTATACTTTT	(SEQ ID NO. 3355)
1SH8_HP0094S92	CUACUACUATCAAGAAAGCTTGCACGTGAT	(SEQ ID NO. 3356)
1SH9_HP0095S93	CUACUACUAAATCATTTGAATTTTATTATTT	(SEQ ID NO. 3357)

1SH10_HP0096S94	CUACUACUAATTTTGGCGTTTATTTTGGAG	(SEQ ID NO. 3358)
1SH11_HP0097S95	CUACUACUACGATTACATCTTAGAAAATATC	(SEQ ID NO. 3359)
1SH12_HP0098S96	CUACUACUAGGGCTTAAAAAGATTTAATG	(SEQ ID NO. 3360)
1RA1_HP0001R1	CAUCAUCAUAGGGTTAAATGGCGACACGA	(SEQ ID NO. 3361)
1RA2_HP0002R2	CAUCAUCAUATGCAAAATCATAGAGGAAA	(SEQ ID NO. 3362)
1RA3_HP0003R3	CAUCAUCAUGGAAAAGTCATGAAAACCTTCT	(SEQ ID NO. 3363)
1RA4_HP0004R4	CAUCAUCAUTAAAGAGTGAAAGCGTTTTTA	(SEQ ID NO. 3364)
1RA5_HP0005R5	CAUCAUCAUGGGCTTTTCATGCAATTATGTG	(SEQ ID NO. 3365)
1RA6_HP0006R6	CAUCAUCAUAGCTTTTAAAGGATTGTTAAA	(SEQ ID NO. 3366)
1RA7_HP0007R7	CAUCAUCAUACGATGCTCATGGTGACCCGT	(SEQ ID NO. 3367)
1RA8_HP0008R8	CAUCAUCAUGATGCGTTTTTGTATTGTT	(SEQ ID NO. 3368)
1RA9_HP0010R9	CAUCAUCAUATGGCAAAAGAAATCAAATTT	(SEQ ID NO. 3369)
1RA10_HP0011R10	CAUCAUCAUTATGAAGTTTCAGCCATTAGG	(SEQ ID NO. 3370)
1RA11_HP0012R11	CAUCAUCAUTGAAAAATGATCTTAAAGT	(SEQ ID NO. 3371)
1RA12_HP0013R12	CAUCAUCAUAGTCGCCATATGAAAAAGATT	(SEQ ID NO. 3372)
1RB1_HP0014R13	CAUCAUCAUAGGTTTGCATGCAAGAGTTTT	(SEQ ID NO. 3373)
1RB2_HP0015R14	CAUCAUCAUTTTTGTATGTCGCGTCATTTTT	(SEQ ID NO. 3374)
1RB3_HP0016R15	CAUCAUCAUATTTTAAATGATTATCCTGT	(SEQ ID NO. 3375)
1RB4_HP0017R16	CAUCAUCAUTTATAGAGCGTAGAATGTTAG	(SEQ ID NO. 3376)
1RB5_HP0018R17	CAUCAUCAUTTAGATTGAAAAATATTCGTTT	(SEQ ID NO. 3377)
1RB6_HP0019R18	CAUCAUCAUGGGAAGTCATGGCTGATAGTT	(SEQ ID NO. 3378)
1RB7_HP0020R19	CAUCAUCAUATGAAAAAAATACAGCACTATC	(SEQ ID NO. 3379)
1RB8_HP0021R20	CAUCAUCAUACACGCATGAAAAAATCTTA	(SEQ ID NO. 3380)
1RB9_HP0022R21	CAUCAUCAUCGTGTTTGGCATCATTTATCC	(SEQ ID NO. 3381)
1RB10_HP0023R22	CAUCAUCAUATGGTTTATTTAAAGTGGAAT	(SEQ ID NO. 3382)
1RB11_HP0024R23	CAUCAUCAUATGAAGTGTAAGAGTGCAAA	(SEQ ID NO. 3383)
1RB12_HP0025R24	CAUCAUCAUAGGAGAAAAACATGAAGAAAA	(SEQ ID NO. 3384)
1RC1_HP0026R25	CAUCAUCAUAAATGTCTGTCTACTTTAGTCAA	(SEQ ID NO. 3385)
1RC2_HP0027R26	CAUCAUCAUAGTGGCTTACAACCCCTAAAAT	(SEQ ID NO. 3386)
1RC3_HP0028R27	CAUCAUCAUAGGAATGAAGTTGATAAAAAT	(SEQ ID NO. 3387)
1RC4_HP0029R28	CAUCAUCAUGTTAAACCATGCTCTTTATCA	(SEQ ID NO. 3388)
1RC5_HP0030R29	CAUCAUCAUATGCTATTGAATTACGATTTT	(SEQ ID NO. 3389)

1RC6_HP0031R30	CAUCAUGGTTGGTTCTTATGAATATTT	(SEQ ID NO. 3390)
1RC7_HP0032R31	CAUCAUAUATAAGCGGCATGAAAAATGTAT	(SEQ ID NO. 3391)
1RC8_HP0033R32	CAUCAUAUAGATAAAATAATGGCTAAATT	(SEQ ID NO. 3392)
1RC9_HP0034R33	CAUCAUAUATGACTTTTGAATGCTTTAT	(SEQ ID NO. 3393)
1RC10_HP0035R34	CAUCAUGGTTAGAGATGGATTTTAGTC	(SEQ ID NO. 3394)
1RC11_HP0036R35	CAUCAUAUATGTTTTCACAAAGCCCTTATT	(SEQ ID NO. 3395)
1RC12_HP0037R36	CAUCAUAUTGATGAAAAATGACGCTTATG	(SEQ ID NO. 3396)
1RD1_HP0038R37	CAUCAUAUATGAAAGAAAGCCTTTCAAT	(SEQ ID NO. 3397)
1RD2_HP0039R38	CAUCAUGGTTGATGATGCGTAAGGTTT	(SEQ ID NO. 3398)
1RD3_HP0040R39	CAUCAUAUATGGCGACCTTATTGTTTTTT	(SEQ ID NO. 3399)
1RD4_HP0041R40	CAUCAUAUAAAAAGGCTAAAGATGAATAA	(SEQ ID NO. 3400)
1RD5_HP0042R41	CAUCAUAUATGGATAACCCCTAAAGGCATT	(SEQ ID NO. 3401)
1RD6_HP0043R42	CAUCAUAUATGAAAAATTAAAAATATCTTA	(SEQ ID NO. 3402)
1RD7_HP0044R43	CAUCAUAUATGAAAGAAAAAATCGCTTTA	(SEQ ID NO. 3403)
1RD8_HP0045R44	CAUCAUAUATGAATGAGATTATTTTAATC	(SEQ ID NO. 3404)
1RD9_HP0046R45	CAUCAUAUTTAAAAAGGATTGGTGTGTG	(SEQ ID NO. 3405)
1RD10_HP0047R46	CAUCAUAUATGGATAGCGTAACTCTAGCA	(SEQ ID NO. 3406)
1RD11_HP0048R47	CAUCAUAUAGAAGTGATAGGGTTGATTG	(SEQ ID NO. 3407)
1RD12_HP0049R48	CAUCAUGGATATTTTGAATGAAAAGAA	(SEQ ID NO. 3408)
1RE1_HP0050R49	CAUCAUGCTTAAAGAAAATGATACAAAT	(SEQ ID NO. 3409)
1RE2_HP0051R50	CAUCAUGAAAGCTTGAAATGAATTATA	(SEQ ID NO. 3410)
1RE3_HP0052R51	CAUCAUAUTTTAATTTAGGGTGTGTTG	(SEQ ID NO. 3411)
1RE4_HP0053R52	CAUCAUAUAGCTTATGAAAGAGCAATCAA	(SEQ ID NO. 3412)
1RE5_HP0054R53	CAUCAUAUTATGCTCTTTTGATCAAAACCTT	(SEQ ID NO. 3413)
1RE6_HP0055R54	CAUCAUAUATGGGACATGTTGTTTAAAGT	(SEQ ID NO. 3414)
1RE7_HP0056R55	CAUCAUAUAGGTAAGCTCATGCAAAAAAAT	(SEQ ID NO. 3415)
1RE8_HP0057R56	CAUCAUAUATGAAAAACAATTAAAAATGTT	(SEQ ID NO. 3416)
1RE9_HP0059R57	CAUCAUAUATGGGAACATTCATTGAAAAA	(SEQ ID NO. 3417)
1RE10_HP0060R58	CAUCAUAUATGTTAAACACCTTAAAAAGT	(SEQ ID NO. 3418)
1RE11_HP0061R59	CAUCAUAUAGAAAAAATTATGATGACTAAG	(SEQ ID NO. 3419)
1RE12_HP0062R60	CAUCAUCCGATGAGCAGAGTGCAAAATGG	(SEQ ID NO. 3420)
1RF1_HP0063R61	CAUCAUAUTGGTTTATGGCTGAATGGAAA	(SEQ ID NO. 3421)

1RF2_HP0064R62	CAUCAUATGGAACAATTCCTGCAAC	(SEQ ID NO. 3422)
1RF3_HP0065R63	CAUCAUATGTTTTCTCATGAAGTTTAT	(SEQ ID NO. 3423)
1RF4_HP0066R64	CAUCAUCGTGAAGCCAAAGAGCATGAA	(SEQ ID NO. 3424)
1RF5_HP0067R65	CAUCAUATGGAAGATTGATGAACACTTA	(SEQ ID NO. 3425)
1RF6_HP0068R66	CAUCAUATGTTAAATAATTGGAGTTTGT	(SEQ ID NO. 3426)
1RF7_HP0069R67	CAUCAUATAACAATAATGGATAAAGGAAA	(SEQ ID NO. 3427)
1RF8_HP0070R68	CAUCAUATGATCATAGAGCGTTTAGTT	(SEQ ID NO. 3428)
1RF9_HP0071R69	CAUCAUGGCAATGCTAGGACTTGTATT	(SEQ ID NO. 3429)
1RF10_HP0072R70	CAUCAUAATAAGAAAAGATTAGCAGAAA	(SEQ ID NO. 3430)
1RF11_HP0073R71	CAUCAUGATGAAACTCACCCCAAAAGA	(SEQ ID NO. 3431)
1RF12_HP0074R72	CAUCAUTGTGTCTAAAAACCCTAAAAA	(SEQ ID NO. 3432)
1RG1_HP0075R73	CAUCAUCGATGAAAATTTTGGGACTG	(SEQ ID NO. 3433)
1RG2_HP0076R74	CAUCAUGCTATGGCAATCATAAAGTCC	(SEQ ID NO. 3434)
1RG3_HP0077R75	CAUCAUATGTCCATTCTAGCCGAAAAG	(SEQ ID NO. 3435)
1RG4_HP0078R76	CAUCAUTAAATGAAAAAGTTTTTTTA	(SEQ ID NO. 3436)
1RG5_HP0079R77	CAUCAUATGAAAAAGTCATTCAAAAAA	(SEQ ID NO. 3437)
1RG6_HP0080R78	CAUCAUTATCAATGAAGCTATATAAAA	(SEQ ID NO. 3438)
1RG7_HP0081R79	CAUCAUAAGAAATGCCCATGCAGGCTT	(SEQ ID NO. 3439)
1RG8_HP0082R80	CAUCAUATGAAATCTACAAGAATTGGT	(SEQ ID NO. 3440)
1RG9_HP0083R81	CAUCAUAAATGAGAAAAATCTATGCTA	(SEQ ID NO. 3441)
1RG10_HP0084R82	CAUCAUTTTATCAAAGGATCTCTATGA	(SEQ ID NO. 3442)
1RG11_HP0085R83	CAUCAUGCATGCAAAAAGAACAAAGAAG	(SEQ ID NO. 3443)
1RG12_HP0086R84	CAUCAUGGAGAAAGACAAATGAGTATGG	(SEQ ID NO. 3444)
1RH1_HP0087R85	CAUCAUATGCGTTATTTTCTTGTAGTT	(SEQ ID NO. 3445)
1RH2_HP0088R86	CAUCAUATGAAAAAGAAAGCTAACGAA	(SEQ ID NO. 3446)
1RH3_HP0089R87	CAUCAUGGGAGAAAAATGGTGCAAAAAA	(SEQ ID NO. 3447)
1RH4_HP0090R88	CAUCAUATGCAATACGCGCTATTATTT	(SEQ ID NO. 3448)
1RH5_HP0091R89	CAUCAUCAAAAAATGAAAAACCATCTGC	(SEQ ID NO. 3449)
1RH6_HP0092R90	CAUCAUATGGTAATCGCGCATTTCTAAT	(SEQ ID NO. 3450)
1RH7_HP0093R91	CAUCAUAGGCGCTTGAGTATATGGCAA	(SEQ ID NO. 3451)
1RH8_HP0094R92	CAUCAUTGAATGGCTTTTAAGGTGGTG	(SEQ ID NO. 3452)
1RH9_HP0095R93	CAUCAUATGCCAAAAACCCAAAGAAAAAC	(SEQ ID NO. 3453)

1RH10_HP0096R94	CAUCAUAUATAGAGATGAAAAACATTCAAA	(SEQ ID NO. 3454)
1RH11_HP0097R95	CAUCAUAUAATGAAAAAATCGTTTTAGT	(SEQ ID NO. 3455)
1RH12_HP0098R96	CAUCAUAUATTTTATGCTTTTGTCCTCCCA	(SEQ ID NO. 3456)
2SA1_HP0099S97	CUACUACUAAGCATTAATACTGCTTTTAT	(SEQ ID NO. 3457)
2SA2_HP0100S98	CUACUACUACTTACAGCAATAAAACACCT	(SEQ ID NO. 3458)
2SA3_HP0101S99	CUACUACUACTAAACGAAACGATTAAAGA	(SEQ ID NO. 3459)
2SA4_HP0102S100	CUACUACUAAATCTTTCTTTAATCGTTTCG	(SEQ ID NO. 3460)
2SA5_HP0103S101	CUACUACUACCCCTGATTAAAGTTTAAACAA	(SEQ ID NO. 3461)
2SA6_HP0104S102	CUACUACUATTTATTTAACTTCACTCTCTTT	(SEQ ID NO. 3462)
2SA7_HP0105S103	CUACUACUATCAAAACCCCACTTCAGACCA	(SEQ ID NO. 3463)
2SA8_HP0106S104	CUACUACUATGTAATGAAACTTTAGCCTAT	(SEQ ID NO. 3464)
2SA9_HP0107S105	CUACUACUATTTATAATAATACCTTTTGA	(SEQ ID NO. 3465)
2SA10_HP0108S106	CUACUACUATTCAGATGGGCTTTTAAAT	(SEQ ID NO. 3466)
2SA11_HP0109S107	CUACUACUAGGTTTCACTCCACTTCGCA	(SEQ ID NO. 3467)
2SA12_HP0110S108	CUACUACUAAATGTTTAAATCGTTTTCAGCA	(SEQ ID NO. 3468)
2SB1_HP0111S109	CUACUACUACATCTTTCATTATTCCTCCTC	(SEQ ID NO. 3469)
2SB2_HP0112S110	CUACUACUATTTATCTCTTTTTCAGCTTTTFA	(SEQ ID NO. 3470)
2SB3_HP0113S111	CUACUACUACCCCTTTTAAAGCGTATGTGC	(SEQ ID NO. 3471)
2SB4_HP0114S112	CUACUACUATTACCATCTTTTAAAGCCAT	(SEQ ID NO. 3472)
2SB5_HP0115S113	CUACUACUAGTTATTGTAAAGCCTTAAGA	(SEQ ID NO. 3473)
2SB6_HP0116S114	CUACUACUACCTTAGCCATTATCTTCCTCT	(SEQ ID NO. 3474)
2SB7_HP0117S115	CUACUACUAGGTTAAACGCGCAATAAAA	(SEQ ID NO. 3475)
2SB8_HP0121S119	CUACUACUATATCAATGTTTCAGTTAAGCCA	(SEQ ID NO. 3476)
2SB9_HP0122S120	CUACUACUACAAACCTTAAATTTAGCAAT	(SEQ ID NO. 3477)
2SB10_HP0123S121	CUACUACUATTTCTACTCAAAAACCTAACCTC	(SEQ ID NO. 3478)
2SB11_HP0124S122	CUACUACUACCGCGATTAGTCTTCATTTT	(SEQ ID NO. 3479)
2SB12_HP0125S123	CUACUACUATTAAGCCCTGCAAGCAACGA	(SEQ ID NO. 3480)
2SC1_HP0126S124	CUACUACUACCAATAGAGATTAAAGATGCT	(SEQ ID NO. 3481)
2SC2_HP0127S125	CUACUACUACTTAAAGCTTACAATGTAAAC	(SEQ ID NO. 3482)
2SC3_HP0128S126	CUACUACUAGATTTTTCAAAGATTTGTTTG	(SEQ ID NO. 3483)
2SC4_HP0129S127	CUACUACUACTAATGCTTATGATGGCTTGG	(SEQ ID NO. 3484)
2SC5_HP0130S128	CUACUACUATACTATTTTTCAGACTTACTA	(SEQ ID NO. 3485)

2SC6_HP0131S129	CUACUACUATCTGCTTTGATATTTCTTAAAA	(SEQ ID NO. 3486)
2SC7_HP0132S130	CUACUACUATCCCTTAGCATTTTAAAGGTTT	(SEQ ID NO. 3487)
2SC8_HP0133S131	CUACUACUAGCCATTAAATAGTCCTAAAA	(SEQ ID NO. 3488)
2SC9_HP0134S132	CUACUACUATTTTAACTAAGCGTGTGTT	(SEQ ID NO. 3489)
2SC10_HP0135S133	CUACUACUAAACAATTTTATTTTGTTCAG	(SEQ ID NO. 3490)
2SC11_HP0136S134	CUACUACUAAAACTACAACTCTCTAAAAAC	(SEQ ID NO. 3491)
2SC12_HP0137S135	CUACUACUATCTTATCCTTTAGTAGAGAAT	(SEQ ID NO. 3492)
2SD1_HP0138S136	CUACUACUAAAGCTCTTTACTCATATAATCA	(SEQ ID NO. 3493)
2SD2_HP0139S137	CUACUACUATTAAAGCCCAAGCTCTTGAGGC	(SEQ ID NO. 3494)
2SD3_HP0140S138	CUACUACUATTTATTTAGGAATGATGGGAT	(SEQ ID NO. 3495)
2SD4_HP0141S139	CUACUACUAACTCTAAATGGCCCTACTTTA	(SEQ ID NO. 3496)
2SD5_HP0142S140	CUACUACUAAAGGTTTAAACCCCAATAAAA	(SEQ ID NO. 3497)
2SD6_HP0144S141	CUACUACUACCTCCCCTATCTAGACATAGG	(SEQ ID NO. 3498)
2SD7_HP0145S142	CUACUACUACCCCTTATTTAGCGTTTGTGATT	(SEQ ID NO. 3499)
2SD8_HP0146S143	CUACUACUACATTTCAACTTTCCTTTATGTC	(SEQ ID NO. 3500)
2SD9_HP0147S144	CUACUACUATTAGCGATTGGATAAAATTCAG	(SEQ ID NO. 3501)
2SD10_HP0148S145	CUACUACUATCATTTTCTACTCCCTTGATT	(SEQ ID NO. 3502)
2SD11_HP0149S146	CUACUACUACCTCTTAAGATTTTAAAAAA	(SEQ ID NO. 3503)
2SD12_HP0150S147	CUACUACUATTTTAAATGCGTTGCTTGA	(SEQ ID NO. 3504)
2SE1_HP0151S148	CUACUACUATTTCTTAATCCAATTCCAATTT	(SEQ ID NO. 3505)
2SE2_HP0152S149	CUACUACUAGATTAAAGAAAGCGGTATTTT	(SEQ ID NO. 3506)
2SE3_HP0153S150	CUACUACUAAAATCCTTTTATTTCCATTTCT	(SEQ ID NO. 3507)
2SE4_HP0154S151	CUACUACUACACTAGCCCATGCTTAAACAAC	(SEQ ID NO. 3508)
2SE5_HP0155S152	CUACUACUACTACCATTTTCCCTTAAATCTA	(SEQ ID NO. 3509)
2SE6_HP0156S153	CUACUACUAGCTTTTATTTCAATTTTAATTT	(SEQ ID NO. 3510)
2SE7_HP0157S154	CUACUACUATTATGCGATGAATTGTAGCAC	(SEQ ID NO. 3511)
2SE8_HP0158S155	CUACUACUACTCTTAGCGTTCTCGTTTGGG	(SEQ ID NO. 3512)
2SE9_HP0159S156	CUACUACUAGAGAACGCTAAGAGTTAAAAA	(SEQ ID NO. 3513)
2SE10_HP0160S157	CUACUACUAGCTTTAACTTATGTGCATATCA	(SEQ ID NO. 3514)
2SE11_HP0161S158	CUACUACUACCTAAGACCACCTTAAAAAAT	(SEQ ID NO. 3515)
2SE12_HP0162S159	CUACUACUAGCATTTCACTCAATATTTGTA	(SEQ ID NO. 3516)
2SF1_HP0163S160	CUACUACUAGTCCCATTCATTCCTTTGTA	(SEQ ID NO. 3517)

2SF2_HP0164S161	CUACUACUAACTTCTCTCAAATTTTCGGGG	(SEQ ID NO. 3518)
2SF3_HP0165S162	CUACUACUAACTCAGCTTTTATCCCCT	(SEQ ID NO. 3519)
2SF4_HP0166S163	CUACUACUATCAGTATTCTAATTTATAACC	(SEQ ID NO. 3520)
2SF5_HP0167S164	CUACUACUATCGTTTTTTCACCTCTGTGTTT	(SEQ ID NO. 3521)
2SF6_HP0168S165	CUACUACUATTTTTCAAATTCATCTACCA	(SEQ ID NO. 3522)
2SF7_HP0169S166	CUACUACUAGCCATTTTGTAGACTCTGACTT	(SEQ ID NO. 3523)
2SF8_HP0170S167	CUACUACUAACTACTTGGCTCCAAAAGAAG	(SEQ ID NO. 3524)
2SF9_HP0171S168	CUACUACUAGCACTTAAGCTTTAGCAATCA	(SEQ ID NO. 3525)
2SF10_HP0172S169	CUACUACUAAATTTTAATTTTCAAACCTTAA	(SEQ ID NO. 3526)
2SF11_HP0173S170	CUACUACUACCTTTAAAAGATTTTGCTAAT	(SEQ ID NO. 3527)
2SF12_HP0174S171	CUACUACUATGAATAAAATCTAGCATCTT	(SEQ ID NO. 3528)
2SG1_HP0175S172	CUACUACUATCAATTAATCTGTTGATAACAA	(SEQ ID NO. 3529)
2SG2_HP0176S173	CUACUACUACTTTCCTTGTGATTAAATTT	(SEQ ID NO. 3530)
2SG3_HP0177S174	CUACUACUACTCACTTCACCTTTTCAAGAT	(SEQ ID NO. 3531)
2SG4_HP0178S175	CUACUACUACTACAATGAGCGTTCTATATC	(SEQ ID NO. 3532)
2SG5_HP0179S176	CUACUACUATTAATTTCTCCTTAATCAAAAC	(SEQ ID NO. 3533)
2SG6_HP0180S177	CUACUACUATTTAATCATGATCGTTTCCTA	(SEQ ID NO. 3534)
2SG7_HP0181S178	CUACUACUATTTATAGGGTTCTTTATTAG	(SEQ ID NO. 3535)
2SG8_HP0182S179	CUACUACUAAATTAATCTTCACTCTCCACAT	(SEQ ID NO. 3536)
2SG9_HP0183S180	CUACUACUATTAATAAAATAGTTGGTGGTA	(SEQ ID NO. 3537)
2SG10_HP0184S181	CUACUACUACCTTTCAAAAATGGTTATAAA	(SEQ ID NO. 3538)
2SG11_HP0185S182	CUACUACUACTACCGCGCTTCTATGACAAC	(SEQ ID NO. 3539)
2SG12_HP0186S183	CUACUACUATTAAGTGGGCGGCGAAATCCTT	(SEQ ID NO. 3540)
2SH1_HP0187S184	CUACUACUATCAAAACTTCAAAAAGATTTT	(SEQ ID NO. 3541)
2SH2_HP0188S185	CUACUACUATCTTACAGATCCCTAAATTC	(SEQ ID NO. 3542)
2SH3_HP0189S186	CUACUACUAAAACCTTTTAATGCGCTTTATT	(SEQ ID NO. 3543)
2SH4_HP0190S187	CUACUACUATTAAGCTCTCTTTTCAGGAAG	(SEQ ID NO. 3544)
2SH5_HP0191S188	CUACUACUAAAGAAATTAAGCGCTTTTACC	(SEQ ID NO. 3545)
2SH6_HP0192S189	CUACUACUACATTAATCACTCATGGTGTCT	(SEQ ID NO. 3546)
2SH7_HP0193S190	CUACUACUAAACCTTATCTTTGTGGAATT	(SEQ ID NO. 3547)
2SH8_HP0194S191	CUACUACUATTTATAAAAATGAAATGATG	(SEQ ID NO. 3548)
2SH9_HP0195S192	CUACUACUACCTTATTGTTCTTTATGCAAA	(SEQ ID NO. 3549)

2SH10_HP0196S193	CUACUACUAGCTTATTATAGCTTATTTCAT	(SEQ ID NO. 3550)
2SH11_HP0197S194	CUACUACUAAATATTTTTTAAACGCTTAAA	(SEQ ID NO. 3551)
2SH12_HP0198S195	CUACUACUACTTAAATCTTAAAGATCTCTA	(SEQ ID NO. 3552)
2RA1_HP0099R97	CAUCAUCAUTTGCTCTAAAGTTTGAGTATC	(SEQ ID NO. 3553)
2RA2_HP0100R98	CAUCAUCAUATGCTCATTCATATTTGCTGC	(SEQ ID NO. 3554)
2RA3_HP0101R99	CAUCAUCAUTTTGAAAACCTCTATTTAGTAT	(SEQ ID NO. 3555)
2RA4_HP0102R100	CAUCAUCAUTGGATTGTTAAAGTTTCTGT	(SEQ ID NO. 3556)
2RA5_HP0103R101	CAUCAUCAUGGAGATAAATGATGTTTCTTT	(SEQ ID NO. 3557)
2RA6_HP0104R102	CAUCAUCAUATGAAAAAATTTGGTTTATG	(SEQ ID NO. 3558)
2RA7_HP0105R103	CAUCAUCAUACATGAAAAACACCAAAATGA	(SEQ ID NO. 3559)
2RA8_HP0106R104	CAUCAUCAUATGCGCATGCAAAACCAAAATT	(SEQ ID NO. 3560)
2RA9_HP0107R105	CAUCAUCAUTTTGTTATAGGAGAAATGATG	(SEQ ID NO. 3561)
2RA10_HP0108R106	CAUCAUCAUATGCTAAACTCGTTAAATGG	(SEQ ID NO. 3562)
2RA11_HP0109R107	CAUCAUCAUATGGGAAAAGTTATTGGAAATT	(SEQ ID NO. 3563)
2RA12_HP0110R108	CAUCAUCAUGGAATAATGAAAGATGAACAC	(SEQ ID NO. 3564)
2RB1_HP0111R109	CAUCAUCAUATGTTGATTGACGAGATTTT	(SEQ ID NO. 3565)
2RB2_HP0112R110	CAUCAUCAUTTGACGCAAGCTCTTTACTAT	(SEQ ID NO. 3566)
2RB3_HP0113R111	CAUCAUCAUACATGACCATCAACACCCATT	(SEQ ID NO. 3567)
2RB4_HP0114R112	CAUCAUCAUTTTATAAGTTAGATGATGGAT	(SEQ ID NO. 3568)
2RB5_HP0115R113	CAUCAUCAUAAACATGAGTTTATGAGATAAAT	(SEQ ID NO. 3569)
2RB6_HP0116R114	CAUCAUCAUCGTTCCATGAAGCACCTTATT	(SEQ ID NO. 3570)
2RB7_HP0117R115	CAUCAUCAUTAAATGGCTAAAGAAAATCCGC	(SEQ ID NO. 3571)
2RB8_HP0121R119	CAUCAUCAUTGTGCGATATATCAAGTTT	(SEQ ID NO. 3572)
2RB9_HP0122R120	CAUCAUCAUTTTGTATAGCGGTTATTGTTG	(SEQ ID NO. 3573)
2RB10_HP0123R121	CAUCAUCAUATGAGTGCGGAACATGATGCT	(SEQ ID NO. 3574)
2RB11_HP0124R122	CAUCAUCAUAAAGAGGTTAGTTTGTAGTAG	(SEQ ID NO. 3575)
2RB12_HP0125R123	CAUCAUCAUCATGCCAAAATGAAGACTAA	(SEQ ID NO. 3576)
2RC1_HP0126R124	CAUCAUCAUATGAGAGTTAAACAGGCGTT	(SEQ ID NO. 3577)
2RC2_HP0127R125	CAUCAUCAUTACATGAAGAAATCTGTTATA	(SEQ ID NO. 3578)
2RC3_HP0128R126	CAUCAUCAUCTCTTTATGGCCTTTTATGAT	(SEQ ID NO. 3579)
2RC4_HP0129R127	CAUCAUCAUATGAAAAAATTAGCGGTTTCT	(SEQ ID NO. 3580)
2RC5_HP0130R128	CAUCAUCAUTTGTTGTGTAACGGATTTTAT	(SEQ ID NO. 3581)

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2RC6_HP0131R129	CAUCAUCAUTGCCCTATCCTTTTATGAGT	(SEQ ID NO. 3582)
2RC7_HP0132R130	CAUCAUCAUTGGCTAGTTTTCATTTTA	(SEQ ID NO. 3583)
2RC8_HP0133R131	CAUCAUCAUTGGCACAAAGAAAAGCAGTT	(SEQ ID NO. 3584)
2RC9_HP0134R132	CAUCAUCAUAAAGGATTATAGAAATGTCAA	(SEQ ID NO. 3585)
2RC10_HP0135R133	CAUCAUCAUTGAAATGAGAAATTTCTCTTTT	(SEQ ID NO. 3586)
2RC11_HP0136R134	CAUCAUCAUAGAATGGAAAAATTAGAAGTA	(SEQ ID NO. 3587)
2RC12_HP0137R135	CAUCAUCAUTAGAAGGGGTGATTATGAGT	(SEQ ID NO. 3588)
2RD1_HP0138R136	CAUCAUCAUTGATCATGGAAAAATACCAT	(SEQ ID NO. 3589)
2RD2_HP0139R137	CAUCAUCAUGCCTTCTTTTGAAAGTCAATTT	(SEQ ID NO. 3590)
2RD3_HP0140R138	CAUCAUCAUTTATGGAATTTTATCAAGTCT	(SEQ ID NO. 3591)
2RD4_HP0141R139	CAUCAUCAUGTGCTAGAATTTTCATCAAAAT	(SEQ ID NO. 3592)
2RD5_HP0142R140	CAUCAUCAUTGTAGCTGGAACTTTACACA	(SEQ ID NO. 3593)
2RD6_HP0144R141	CAUCAUCAUTATTGTCATGCAAGAAAATGTG	(SEQ ID NO. 3594)
2RD7_HP0145R142	CAUCAUCAUGGAGGTTGGAAATGTTAGTT	(SEQ ID NO. 3595)
2RD8_HP0146R143	CAUCAUCAUGGTGAATGATGGATTTAGAAA	(SEQ ID NO. 3596)
2RD9_HP0147R144	CAUCAUCAUATGGATTTTAAACGACCAT	(SEQ ID NO. 3597)
2RD10_HP0148R145	CAUCAUCAUAAAGAGATGAAATTTTAAAC	(SEQ ID NO. 3598)
2RD11_HP0149R146	CAUCAUCAUTGTTTAGCACATGAGAAATCTT	(SEQ ID NO. 3599)
2RD12_HP0150R147	CAUCAUCAUAGAGGGAATTAATGAAAGA	(SEQ ID NO. 3600)
2RE1_HP0151R148	CAUCAUCAUTGATAAAAAGCCTAAATTC	(SEQ ID NO. 3601)
2RE2_HP0152R149	CAUCAUCAUTTGATTAGTGTGCTCATAGC	(SEQ ID NO. 3602)
2RE3_HP0153R150	CAUCAUCAUGTAATTTAATGGCAATAGATG	(SEQ ID NO. 3603)
2RE4_HP0154R151	CAUCAUCAUTTTGATGCTAACCATTAAGA	(SEQ ID NO. 3604)
2RE5_HP0155R152	CAUCAUCAUGTTGTTTAAAGCATGGCTAGTG	(SEQ ID NO. 3605)
2RE6_HP0156R153	CAUCAUCAUATGGTAGTGTAAAAAAGATG	(SEQ ID NO. 3606)
2RE7_HP0157R154	CAUCAUCAUCATGCAGCATTTAGTCTTAAT	(SEQ ID NO. 3607)
2RE8_HP0158R155	CAUCAUCAUGCCTTTTGATGTTAAGTAGAG	(SEQ ID NO. 3608)
2RE9_HP0159R156	CAUCAUCAUAAATGAGTATTATTATTCCTAT	(SEQ ID NO. 3609)
2RE10_HP0160R157	CAUCAUCAUGAATGAGATGATAAAGAGTTG	(SEQ ID NO. 3610)
2RE11_HP0161R158	CAUCAUCAUCCTATGATTAGGACGCAGAG	(SEQ ID NO. 3611)
2RE12_HP0162R159	CAUCAUCAUTACAAAGGAATTGAATGGGAC	(SEQ ID NO. 3612)
2RF1_HP0163R160	CAUCAUCACATGTTCAAACGATTGAGAAG	(SEQ ID NO. 3613)

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2RF2_HP0164R161	CAUCAUGGATAAAAGCGTGAGTTGTAA	(SEQ ID NO. 3614)
2RF3_HP0165R162	CAUCAUCAUTTTGCGTTTCTCTATCTTTT	(SEQ ID NO. 3615)
2RF4_HP0166R163	CAUCAUCAUTGATAGAGTTTAAATGATA	(SEQ ID NO. 3616)
2RF5_HP0167R164	CAUCAUAAATGGCTGTAGATGAAT	(SEQ ID NO. 3617)
2RF6_HP0168R165	CAUCAUACGCATGCCCTTAGAAACGAT	(SEQ ID NO. 3618)
2RF7_HP0169R166	CAUCAUCAUTTTGAACCAAGTTGAATTACT	(SEQ ID NO. 3619)
2RF8_HP0170R167	CAUCAUAAACGACAAATGACACAAGAAGA	(SEQ ID NO. 3620)
2RF9_HP0171R168	CAUCAUGGTTCTGTGTTTGTGGATAACTA	(SEQ ID NO. 3621)
2RF10_HP0172R169	CAUCAUAAACATGATTAGTTTAAAGAA	(SEQ ID NO. 3622)
2RF11_HP0173R170	CAUCAUGAATGCTAGATTTTATTCAAG	(SEQ ID NO. 3623)
2RF12_HP0174R171	CAUCAUGACTTTGGCTTAAATTACCC	(SEQ ID NO. 3624)
2RG1_HP0175R172	CAUCAUAAACACACAATGAAAAAATA	(SEQ ID NO. 3625)
2RG2_HP0176R173	CAUCAUATGTTAGTTAAAGGCAATGAA	(SEQ ID NO. 3626)
2RG3_HP0177R174	CAUCAUACATGGCAATTGGGATGAGCG	(SEQ ID NO. 3627)
2RG4_HP0178R175	CAUCAUAGAATGTTACAACCCCTAA	(SEQ ID NO. 3628)
2RG5_HP0179R176	CAUCAUTCATGATTAAGCGATTAAATA	(SEQ ID NO. 3629)
2RG6_HP0180R177	CAUCAUCATGCGTCTTCTTCTGTTCAA	(SEQ ID NO. 3630)
2RG7_HP0181R178	CAUCAUGTGGTGGTGGTAGCCTTTGGG	(SEQ ID NO. 3631)
2RG8_HP0182R179	CAUCAUCATGTTTTTCTAACCAATACAT	(SEQ ID NO. 3632)
2RG9_HP0183R180	CAUCAUGTGGAGAGTGAAGAATAATGG	(SEQ ID NO. 3633)
2RG10_HP0184R181	CAUCAUAGATGACAGAAATGGAATTAA	(SEQ ID NO. 3634)
2RG11_HP0185R182	CAUCAUTGAAAGGATTTTAAATGTCAG	(SEQ ID NO. 3635)
2RG12_HP0186R183	CAUCAUAAATTGAGTGAAGAAGAGTG	(SEQ ID NO. 3636)
2RH1_HP0187R184	CAUCAUATGTTGTGCTGCTAAGAAATGAA	(SEQ ID NO. 3637)
2RH2_HP0188R185	CAUCAUGAATGAAACCACTATATAAAG	(SEQ ID NO. 3638)
2RH3_HP0189R186	CAUCAUTTGAGATGTTGGAAAAATTGA	(SEQ ID NO. 3639)
2RH4_HP0190R187	CAUCAUAGTGGTGGTCTTTTGGAAAAATC	(SEQ ID NO. 3640)
2RH5_HP0191R188	CAUCAUAAACACCATGAGTGATAATGAA	(SEQ ID NO. 3641)
2RH6_HP0192R189	CAUCAUGGTAGAAATGAAAAATAACAT	(SEQ ID NO. 3642)
2RH7_HP0193R190	CAUCAUATGCAACAAGAGAGATTATA	(SEQ ID NO. 3643)
2RH8_HP0194R191	CAUCAUAAAGGATCGTTCAATGACAAAA	(SEQ ID NO. 3644)
2RH9_HP0195R192	CAUCAUTCATGGGATTTTAAAGGTA	(SEQ ID NO. 3645)

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2RH10_HP0196R193	CAUCAUTGATGAAATTAAGGAATTGT	(SEQ ID NO. 3646)
2RH11_HP0197R194	CAUCAUAAGGACAATCAATGAAGATA	(SEQ ID NO. 3647)
2RH12_HP0198R195	CAUCAUGGAGTTTAAATTGAACAAG	(SEQ ID NO. 3648)
3SA1_HP0199S196	CUACUUAATTCAATCTGCATAATGGTAG	(SEQ ID NO. 3649)
3SA2_HP0200S197	CUACUUAACCTAGTATCTTTAGTAAAT	(SEQ ID NO. 3650)
3SA3_HP0201S198	CUACUUAATAGTCATCTTTAAGCGTCTTG	(SEQ ID NO. 3651)
3SA4_HP0202S199	CUACUUAACCTAACTTCCTCCAAAATACA	(SEQ ID NO. 3652)
3SA5_HP0203S200	CUACUUAAGGCTTGCTCTAAAGCCATTG	(SEQ ID NO. 3653)
3SA6_HP0204S201	CUACUUAATTATTTTGAAAATTTATGTT	(SEQ ID NO. 3654)
3SA7_HP0205S202	CUACUUAATCCTTTTCACTTTATAACAT	(SEQ ID NO. 3655)
3SA8_HP0206S203	CUACUUAATCCTTTTAAATTATCTCTTTAG	(SEQ ID NO. 3656)
3SA9_HP0207S204	CUACUUAACCCCTTTTAAACTAATGCGA	(SEQ ID NO. 3657)
3SA10_HP0209S205	CUACUUAAGTTTAAATTTTAAAAAACGAT	(SEQ ID NO. 3658)
3SA11_HP0210S206	CUACUUAACCCCTACAAAGCTTTCAATAG	(SEQ ID NO. 3659)
3SA12_HP0211S207	CUACUUAATTAAGTTCTATTTTAAATTC	(SEQ ID NO. 3660)
3SB1_HP0212S208	CUACUUAATGTTTATTTTATGCCTCACT	(SEQ ID NO. 3661)
3SB2_HP0213S209	CUACUUAATTAAGAGTTTTCGCAATG	(SEQ ID NO. 3662)
3SB3_HP0214S210	CUACUUAATAATCAATTAATAATTAACGA	(SEQ ID NO. 3663)
3SB4_HP0215S211	CUACUUAACCATTCATCCCTAATAAAA	(SEQ ID NO. 3664)
3SB5_HP0216S212	CUACUUAACCTACACTCCCGCTACATTTT	(SEQ ID NO. 3665)
3SB6_HP0217S213	CUACUUAACCTATCTTTCCGCTAAATGAA	(SEQ ID NO. 3666)
3SB7_HP0218S214	CUACUUAACCACTATTTCTCTCACAACCTG	(SEQ ID NO. 3667)
3SB8_HP0219S215	CUACUUAATTAAGGTTTAAAGGGTCT	(SEQ ID NO. 3668)
3SB9_HP0220S216	CUACUUAATTAATAAGAGCTTGAAATATT	(SEQ ID NO. 3669)
3SB10_HP0221S217	CUACUUAATAAAGTTCAAATCGGTAACA	(SEQ ID NO. 3670)
3SB11_HP0222S218	CUACUUAATTACTCTATTTTCTTAAAGC	(SEQ ID NO. 3671)
3SB12_HP0223S219	CUACUUAATCCAATCACATCCATTCACA	(SEQ ID NO. 3672)
3SC1_HP0224S220	CUACUUAACCCCTTAATGCGACTTTTA	(SEQ ID NO. 3673)
3SC2_HP0225S221	CUACUUAATAATCATTTAAGCGGTTTTTA	(SEQ ID NO. 3674)
3SC3_HP0226S222	CUACUUAATTACCCATAATGAGCTTG	(SEQ ID NO. 3675)
3SC4_HP0227S223	CUACUUAATTAGTAAGCAACACATAATT	(SEQ ID NO. 3676)
3SC5_HP0228S224	CUACUUAATCATGCAATCCCTTTAGATTT	(SEQ ID NO. 3677)

3SC6_HP0229S225	CUACUACUATGAGAACCGATTCAATATCAA	(SEQ ID NO. 3678)
3SC7_HP0230S226	CUACUACUATTCACCGCTCAAGGAGATCGG	(SEQ ID NO. 3679)
3SC8_HP0231S227	CUACUACUATATATCATGCCTTATAATGGT	(SEQ ID NO. 3680)
3SC9_HP0232S228	CUACUACUATGAATCAATTAATTAATGAGT	(SEQ ID NO. 3681)
3SC10_HP0233S229	CUACUACUAGCTCATTTATTGCAACCTATGG	(SEQ ID NO. 3682)
3SC11_HP0234S230	CUACUACUAAACCCFACAAAGACCAATAGAT	(SEQ ID NO. 3683)
3SC12_HP0235S231	CUACUACUAGGGGGTTGATTAAATTTTCAA	(SEQ ID NO. 3684)
3SD1_HP0236S232	CUACUACUAGATTAAAGCTTAGGAGAAATCC	(SEQ ID NO. 3685)
3SD2_HP0237S233	CUACUACUAAACAACGCAATTAACAACACT	(SEQ ID NO. 3686)
3SD3_HP0238S234	CUACUACUACTTATTCGCTTTCTAACATTT	(SEQ ID NO. 3687)
3SD4_HP0239S235	CUACUACUAAATTATTCCTCGTAATATTCGC	(SEQ ID NO. 3688)
3SD5_HP0240S236	CUACUACUACCATTAATAAGTCCTATAAAT	(SEQ ID NO. 3689)
3SD6_HP0241S237	CUACUACUATTCCTTAAGGCTCTTTTAGGAG	(SEQ ID NO. 3690)
3SD7_HP0242S238	CUACUACUAGCGGATAAGCTCATTCATTCC	(SEQ ID NO. 3691)
3SD8_HP0243S239	CUACUACUATGTCGCTTAAGCCAAATGGG	(SEQ ID NO. 3692)
3SD9_HP0244S240	CUACUACUACCAAATAAAGAAGCGTTAAGA	(SEQ ID NO. 3693)
3SD10_HP0245S241	CUACUACUAAATTTTTCATGGTTTGTGTTT	(SEQ ID NO. 3694)
3SD11_HP0246S242	CUACUACUATGTTTATCATAGTATCTCCAT	(SEQ ID NO. 3695)
3SD12_HP0247S243	CUACUACUATTAAACGGGTTTGGGTTTTTT	(SEQ ID NO. 3696)
3SE1_HP0248S244	CUACUACUACGTTTTTTAAGGCTCTTAGTC	(SEQ ID NO. 3697)
3SE2_HP0249S245	CUACUACUATTATAACAACAACAAGAAAC	(SEQ ID NO. 3698)
3SE3_HP0250S246	CUACUACUATTAAAGCCTGGATTCTAACAA	(SEQ ID NO. 3699)
3SE4_HP0251S247	CUACUACUACCCCTTATTGAGCATGTTA	(SEQ ID NO. 3700)
3SE5_HP0252S248	CUACUACUATCCTTAAAAACCGACTGAATA	(SEQ ID NO. 3701)
3SE6_HP0253S249	CUACUACUACGCCACGCTTAAAGGAAGGCT	(SEQ ID NO. 3702)
3SE7_HP0254S250	CUACUACUATTAAAAACCTATCGTGTAAAT	(SEQ ID NO. 3703)
3SE8_HP0255S251	CUACUACUATACAGAAGCGAATTTTTCAT	(SEQ ID NO. 3704)
3SE9_HP0256S252	CUACUACUACAGACCCCAATAACAAGATTTT	(SEQ ID NO. 3705)
3SE10_HP0257S253	CUACUACUACCGCTACAATGAACATCATAC	(SEQ ID NO. 3706)
3SE11_HP0258S254	CUACUACUATTTTATAGCAAACGAGTGAGA	(SEQ ID NO. 3707)
3SE12_HP0259S255	CUACUACUATCAAAACCCCTACACCCCTATCC	(SEQ ID NO. 3708)
3SF1_HP0260S256	CUACUACUATTTATCTTAAATTTTCGTATT	(SEQ ID NO. 3709)

3SF2_HP0261S257	CUACUACUAACTTTATGCAAGATAATTTTC	(SEQ ID NO. 3710)
3SF3_HP0262S258	CUACUACUACTAGCCTTTTAGGCTTGTCCTTT	(SEQ ID NO. 3711)
3SF4_HP0263S259	CUACUACUAGCTCACACTAACGACAAACTC	(SEQ ID NO. 3712)
3SF5_HP0264S260	CUACUACUAAACAAACCTCACTTAATCTTA	(SEQ ID NO. 3713)
3SF6_HP0265S261	CUACUACUACCTCCTATTTTGTCAAGAAAT	(SEQ ID NO. 3714)
3SF7_HP0266S262	CUACUACUACTATGATTTTCTTGCATGCATT	(SEQ ID NO. 3715)
3SF8_HP0267S263	CUACUACUAAATTAGATCACCCCTTTTCCCC	(SEQ ID NO. 3716)
3SF9_HP0268S264	CUACUACUATTAAATAATGTGCAATTCATA	(SEQ ID NO. 3717)
3SF10_HP0269S265	CUACUACUATATTTTATTAGTTGCCTTTA	(SEQ ID NO. 3718)
3SF11_HP0270S266	CUACUACUACCCCTTAAGCACCCAAACCCC	(SEQ ID NO. 3719)
3SF12_HP0271S267	CUACUACUACTAAACGCATGCTTTTTCATT	(SEQ ID NO. 3720)
3SG1_HP0272S268	CUACUACUATCATTTAATAGACTCCGGATT	(SEQ ID NO. 3721)
3SG2_HP0273S269	CUACUACUAAATCCTATTGGAGATCAATACT	(SEQ ID NO. 3722)
3SG3_HP0274S270	CUACUACUAAATTTTAGCGCACTTTAGTTT	(SEQ ID NO. 3723)
3SG4_HP0275S271	CUACUACUACCTATTTCTTGCATTCTTGAA	(SEQ ID NO. 3724)
3SG5_HP0276S272	CUACUACUATTAAATAATCAATCTAAAAAGA	(SEQ ID NO. 3725)
3SG6_HP0277S273	CUACUACUATAGCCTTTAATCTTGCTCTTT	(SEQ ID NO. 3726)
3SG7_HP0278S274	CUACUACUATCAAGCAAACTCTATCGTCAA	(SEQ ID NO. 3727)
3SG8_HP0279S275	CUACUACUATCTTTGTAAAGTCATCTCTTTT	(SEQ ID NO. 3728)
3SG9_HP0280S276	CUACUACUACTATCTTTGATAAATCTCAGG	(SEQ ID NO. 3729)
3SG10_HP0281S277	CUACUACUATTCAATGAGAGCGGGAGTGT	(SEQ ID NO. 3730)
3SG11_HP0282S278	CUACUACUACATCTTTTCACTCCGCTACAG	(SEQ ID NO. 3731)
3SG12_HP0283S279	CUACUACUACCTTAATGCCATTTTCTTAAC	(SEQ ID NO. 3732)
3SH1_HP0284S280	CUACUACUATTTTCATTTTGTTCCTTTTA	(SEQ ID NO. 3733)
3SH2_HP0285S281	CUACUACUATTTTGTAGAAAACGGCATGATT	(SEQ ID NO. 3734)
3SH3_HP0286S282	CUACUACUATCACCCGTTCAATAAATCATA	(SEQ ID NO. 3735)
3SH4_HP0287S283	CUACUACUACTTCCACCTTTTAAAGATT	(SEQ ID NO. 3736)
3SH5_HP0288S284	CUACUACUAAAGGACTAAAGCACATTTT	(SEQ ID NO. 3737)
3SH6_HP0289S285	CUACUACUAGAACGAAGCATATAGCAAAA	(SEQ ID NO. 3738)
3SH7_HP0290S286	CUACUACUATCAAAACCCCTTTTAAGCCTTC	(SEQ ID NO. 3739)
3SH8_HP0291S287	CUACUACUACTTTTATTTTAACTCTTT	(SEQ ID NO. 3740)
3SH9_HP0292S288	CUACUACUAAAAAATCCCCAAAATCATTTA	(SEQ ID NO. 3741)

3SH10_HP0293S289	CUACUACUAGCTCTGTTTTTTATAGTTATTT	(SEQ ID NO. 3742)
3SH11_HP0294S290	CUACUACUACCTCCTTTTGGCCCTTTATTTTC	(SEQ ID NO. 3743)
3SH12_HP0295S291	CUACUACUAAACCAACCAAAAGATTACAAGTA	(SEQ ID NO. 3744)
3RA1_HP0199R196	CAUCAUCAUATGCAATTTGAAATGCGTAA	(SEQ ID NO. 3745)
3RA2_HP0200R197	CAUCAUCAUTTTATGGCAGTACCTGATAGA	(SEQ ID NO. 3746)
3RA3_HP0201R198	CAUCAUCAUCGCATGATGAAAAATTGTAATA	(SEQ ID NO. 3747)
3RA4_HP0202R199	CAUCAUCAUATGGAATTTTACGCCCTCTCTT	(SEQ ID NO. 3748)
3RA5_HP0203R200	CAUCAUCAUATGAAAAAGGTTGTTTTTTTA	(SEQ ID NO. 3749)
3RA6_HP0204R201	CAUCAUCAUTTTTGATGTTTAAAAAATGT	(SEQ ID NO. 3750)
3RA7_HP0205R202	CAUCAUCAUTTGAGCGAGCTTGTAACCTGAA	(SEQ ID NO. 3751)
3RA8_HP0206R203	CAUCAUCAUATGGAATTTTATAAGCGTGTT	(SEQ ID NO. 3752)
3RA9_HP0207R204	CAUCAUCAUAAATGGTGCAATTTCAAAACA	(SEQ ID NO. 3753)
3RA10_HP0209R205	CAUCAUCAUAGGGTGCTTAATCAAAAAGTT	(SEQ ID NO. 3754)
3RA11_HP0210R206	CAUCAUCAUGGAAAAAGATCAATGCTAATC	(SEQ ID NO. 3755)
3RA12_HP0211R207	CAUCAUCAUATGCTAGGAAACGTTAAAAAA	(SEQ ID NO. 3756)
3RB1_HP0212R208	CAUCAUCAUGCATGGACGCTTTAGAAATCA	(SEQ ID NO. 3757)
3RB2_HP0213R209	CAUCAUCAUGAGTGGTAAAGAAAGTGATA	(SEQ ID NO. 3758)
3RB3_HP0214R210	CAUCAUCAUATAAAATGGAATAATCATTCG	(SEQ ID NO. 3759)
3RB4_HP0215R211	CAUCAUCAUGGAAAAAAGTGAAAGAAAGAGT	(SEQ ID NO. 3760)
3RB5_HP0216R212	CAUCAUCAUTAGGGGATTGAATGTTGTTTT	(SEQ ID NO. 3761)
3RB6_HP0217R213	CAUCAUCAUTATGGGGTTAAAAAATAAAAT	(SEQ ID NO. 3762)
3RB7_HP0218R214	CAUCAUCAUAAAAGGCTTAAAAATGAAAC	(SEQ ID NO. 3763)
3RB8_HP0219R215	CAUCAUCAUTTTATTTTGTGTTAGTAT	(SEQ ID NO. 3764)
3RB9_HP0220R216	CAUCAUCAUACCTTGTACAAACGAATTTAT	(SEQ ID NO. 3765)
3RB10_HP0221R217	CAUCAUCAUAAATGGCAAAACATGATTTAG	(SEQ ID NO. 3766)
3RB11_HP0222R218	CAUCAUCAUTGATGGAAAAAGACAGAAAAACA	(SEQ ID NO. 3767)
3RB12_HP0223R219	CAUCAUCAUGTGATTTTAAAAAGAGTGGT	(SEQ ID NO. 3768)
3RC1_HP0224R220	CAUCAUCAUATGAAGGTATATCTTATT	(SEQ ID NO. 3769)
3RC2_HP0225R221	CAUCAUCAUATGAGGGGTTTAAGCGTTTGG	(SEQ ID NO. 3770)
3RC3_HP0226R222	CAUCAUCAUTTTTTTATGGAAGAATCAACA	(SEQ ID NO. 3771)
3RC4_HP0227R223	CAUCAUCAUAAACATGAAAAAATCCCTCTTA	(SEQ ID NO. 3772)
3RC5_HP0228R224	CAUCAUCAUTATGAGAAAGAAAGGCATGT	(SEQ ID NO. 3773)

3RC6_HP0229R225	CAUCAUCAUTTTATGAAAAAACGATTTTA	(SEQ ID NO. 3774)
3RC7_HP0230R226	CAUCAUCAUATGATTATCATTCCTGCTAGG	(SEQ ID NO. 3775)
3RC8_HP0231R227	CAUCAUCAUAATGATATTAAGAGCGAGTGT	(SEQ ID NO. 3776)
3RC9_HP0232R228	CAUCAUCAUATGAAAAAACCCCTATAGGAAG	(SEQ ID NO. 3777)
3RC10_HP0233R229	CAUCAUCAUTAAAAAATGCAAGTATTCCT	(SEQ ID NO. 3778)
3RC11_HP0234R230	CAUCAUCAUAATAATGAGCGCAATGATGC	(SEQ ID NO. 3779)
3RC12_HP0235R231	CAUCAUCAUATGGGTGTCAAAATTTTAAAA	(SEQ ID NO. 3780)
3RD1_HP0236R232	CAUCAUCAUTTTTFAATGCGTTTGTTTTA	(SEQ ID NO. 3781)
3RD2_HP0237R233	CAUCAUCAUAGTGGGAAATTTAGTGATTGG	(SEQ ID NO. 3782)
3RD3_HP0238R234	CAUCAUCAUCATGCTATTTTCAAAACTCTT	(SEQ ID NO. 3783)
3RD4_HP0239R235	CAUCAUCAUAGGACTTTTAAATGGAGTTAG	(SEQ ID NO. 3784)
3RD5_HP0240R236	CAUCAUCAUATGCAAGAAAAACAACTTAAA	(SEQ ID NO. 3785)
3RD6_HP0241R237	CAUCAUCAUTCAGCGGGAATGAATGAGCTT	(SEQ ID NO. 3786)
3RD7_HP0242R238	CAUCAUCAUAGCCAGCATGAGAGATTACAG	(SEQ ID NO. 3787)
3RD8_HP0243R239	CAUCAUCAUGATGAAAAACATTTGAAATCT	(SEQ ID NO. 3788)
3RD9_HP0244R240	CAUCAUCAUATGAAAAAATCCAAGCACTTA	(SEQ ID NO. 3789)
3RD10_HP0245R241	CAUCAUCAUGAGATACTATGATAAACAAACA	(SEQ ID NO. 3790)
3RD11_HP0246R242	CAUCAUCAUTGATTGAAACGGGTGTTTTTA	(SEQ ID NO. 3791)
3RD12_HP0247R243	CAUCAUCAUCCCATGGGAATTGAATCAACCA	(SEQ ID NO. 3792)
3RE1_HP0248R244	CAUCAUCAUATGCCCATTTGATTGAAACGAA	(SEQ ID NO. 3793)
3RE2_HP0249R245	CAUCAUCAUAACGCATGGCATCTCTTGCT	(SEQ ID NO. 3794)
3RE3_HP0250R246	CAUCAUCAUGTTATATGCTAGAAAAATCAAAA	(SEQ ID NO. 3795)
3RE4_HP0251R247	CAUCAUCAUGAGCGTGAGCAGTTTGTTTAA	(SEQ ID NO. 3796)
3RE5_HP0252R248	CAUCAUCAUTTGAAAAAACCACTCCTTTAAA	(SEQ ID NO. 3797)
3RE6_HP0253R249	CAUCAUCAUATGAAAAAATACCAATACAAAA	(SEQ ID NO. 3798)
3RE7_HP0254R250	CAUCAUCAUGTGGCGTTAGCTGAAGACGAT	(SEQ ID NO. 3799)
3RE8_HP0255R251	CAUCAUCAUTTTTATGGCAGATGTCGTTGT	(SEQ ID NO. 3800)
3RE9_HP0256R252	CAUCAUCAUCTATGAAAAAATTCGCTTCTG	(SEQ ID NO. 3801)
3RE10_HP0257R253	CAUCAUCAUATGCGTAAATCTTGTATTG	(SEQ ID NO. 3802)
3RE11_HP0258R254	CAUCAUCAUGGGGTATGATGTTCAATTGTAG	(SEQ ID NO. 3803)
3RE12_HP0259R255	CAUCAUCAUGGAGCTGGTGGATGTATTGAG	(SEQ ID NO. 3804)
3RF1_HP0260R256	CAUCAUCAUGGGAATAATTATCTTGCAATAA	(SEQ ID NO. 3805)

3RF2_HP0261R257	CAUCAUCAUGACATGCAATTTTAAATCAA	(SEQ ID NO. 3806)
3RF3_HP0262R258	CAUCAUCAUATGGATTTCTATGGATTAAG	(SEQ ID NO. 3807)
3RF4_HP0263R259	CAUCAUCAUATGAAACCTTATTTCAAGTTTA	(SEQ ID NO. 3808)
3RF5_HP0264R260	CAUCAUCAUAAAGGATTGATAATGAATTTA	(SEQ ID NO. 3809)
3RF6_HP0265R261	CAUCAUCAUTTGAAAAAGGATTGAATGATG	(SEQ ID NO. 3810)
3RF7_HP0266R262	CAUCAUCAUAGGGTTTGTATGCTGTATAAAA	(SEQ ID NO. 3811)
3RF8_HP0267R263	CAUCAUCAUATGCAAGAAATCATAGGAGCG	(SEQ ID NO. 3812)
3RF9_HP0268R264	CAUCAUCAUAGAGTCAATGAAACTAGTTT	(SEQ ID NO. 3813)
3RF10_HP0269R265	CAUCAUCAUCTTGTATTGAAAGTTTATATT	(SEQ ID NO. 3814)
3RF11_HP0270R266	CAUCAUCAUGATGATTGGGTTTGGGTATTT	(SEQ ID NO. 3815)
3RF12_HP0271R267	CAUCAUCAUGGTGCTTAAGGGTTAAAAAA	(SEQ ID NO. 3816)
3RG1_HP0272R268	CAUCAUCAUAGCATGCGTTTTFAGTTACATT	(SEQ ID NO. 3817)
3RG2_HP0273R269	CAUCAUCAUAAATGAAGCCATTGCATTTTTC	(SEQ ID NO. 3818)
3RG3_HP0274R270	CAUCAUCAUATGCAAGATTTTGTATTTTAGT	(SEQ ID NO. 3819)
3RG4_HP0275R271	CAUCAUCAUATGAATATTTCAAAATAAAGAAA	(SEQ ID NO. 3820)
3RG5_HP0276R272	CAUCAUCAUGAATGCAAGAAATAGGGATTT	(SEQ ID NO. 3821)
3RG6_HP0277R273	CAUCAUCAUAGGAGTTAGTCATGTCATTAT	(SEQ ID NO. 3822)
3RG7_HP0278R274	CAUCAUCAUGCAATGGCTAAAAATCACAAACC	(SEQ ID NO. 3823)
3RG8_HP0279R275	CAUCAUCAUGATAGAGTTTGCTTGAAAAATA	(SEQ ID NO. 3824)
3RG9_HP0280R276	CAUCAUCAUATGACTTACAAAGAACGACTC	(SEQ ID NO. 3825)
3RG10_HP0281R277	CAUCAUCAUCTTAAACGATGGATTTTCAAC	(SEQ ID NO. 3826)
3RG11_HP0282R278	CAUCAUCAUTTTTAGGAAGTTTGGAATTGA	(SEQ ID NO. 3827)
3RG12_HP0283R279	CAUCAUCAUTGAAAGAAATGCAAGAAATTTT	(SEQ ID NO. 3828)
3RH1_HP0284R280	CAUCAUCAUATGGCATTAAAGGGTATTGTTA	(SEQ ID NO. 3829)
3RH2_HP0285R281	CAUCAUCAUAGGGAAACAAAAATGAAAAAAG	(SEQ ID NO. 3830)
3RH3_HP0286R282	CAUCAUCAUATCATGCCGTTTCTCTAAAAAAT	(SEQ ID NO. 3831)
3RH4_HP0287R283	CAUCAUCAUATGCCGTTTCTCTAGTGGTTTTT	(SEQ ID NO. 3832)
3RH5_HP0288R284	CAUCAUCAUGGTGGAAGATGAAAAAATTTG	(SEQ ID NO. 3833)
3RH6_HP0289R285	CAUCAUCAUATGAAAAAGTTTAAAAAAGAAA	(SEQ ID NO. 3834)
3RH7_HP0290R286	CAUCAUCAUGGTTTCTCTATGTTTAATTAT	(SEQ ID NO. 3835)
3RH8_HP0291R287	CAUCAUCAUATGCAAAAGAAATTTGGATAGT	(SEQ ID NO. 3836)
3RH9_HP0292R288	CAUCAUCAUAGTTGTTATGTTTGAAAAAAT	(SEQ ID NO. 3837)

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3RH10_HP0293R289	CAUCAUAUATGATTTTGGGGATTTTAA	(SEQ ID NO. 3838)
3RH11_HP0294R290	CAUCAUAUATATGAGACATGGAGATATTA	(SEQ ID NO. 3839)
3RH12_HP0295R291	CAUCAUAUTCATGCGGTTACCTTTGGCT	(SEQ ID NO. 3840)
4SA1_HP0296S292	CUACUACUATATGCTACAATTTTAGTGAT	(SEQ ID NO. 3841)
4SA2_HP0297S293	CUACUACUACTACTCCCCAAAATTTTGACT	(SEQ ID NO. 3842)
4SA3_HP0298S294	CUACUACUATTTATTTTCTAAATACACCT	(SEQ ID NO. 3843)
4SA4_HP0299S295	CUACUACUAAATATGACAACCTTATTCTAG	(SEQ ID NO. 3844)
4SA5_HP0300S296	CUACUACUACATGCAAGCTCCTTTTAAAGAG	(SEQ ID NO. 3845)
4SA6_HP0301S297	CUACUACUATCATCGCAACTCCTTTTGAAA	(SEQ ID NO. 3846)
4SA7_HP0302S298	CUACUACUATTTATTTGGCAAATCTTTGCA	(SEQ ID NO. 3847)
4SA8_HP0303S299	CUACUACUATTAGGTAACGCTTCCAAACAA	(SEQ ID NO. 3848)
4SA9_HP0304S300	CUACUACUATTCATGGCGATCGGAGTTTCA	(SEQ ID NO. 3849)
4SA10_HP0305S301	CUACUACUATTTATCCCTTGATCATGCTTTC	(SEQ ID NO. 3850)
4SA11_HP0306S302	CUACUACUAAAATTCACACACCTTTTATGA	(SEQ ID NO. 3851)
4SA12_HP0307S303	CUACUACUATTTATTTGTTTATTTTGTTGT	(SEQ ID NO. 3852)
4SB1_HP0308S304	CUACUACUATTTGTTGTCAAAACCTTACCATTA	(SEQ ID NO. 3853)
4SB2_HP0309S305	CUACUACUAGCTCCTTTTAAAGTGAATTTT	(SEQ ID NO. 3854)
4SB3_HP0310S306	CUACUACUATCGCTATTTTCTTAGGGTT	(SEQ ID NO. 3855)
4SB4_HP0311S307	CUACUACUAGGGATTTGGGCATCAGTGAA	(SEQ ID NO. 3856)
4SB5_HP0312S308	CUACUACUATTTATTTGGGTTTCAAAACCTT	(SEQ ID NO. 3857)
4SB6_HP0313S309	CUACUACUATTTCTATTTATGGATAGCTGTT	(SEQ ID NO. 3858)
4SB7_HP0314S310	CUACUACUATTAATAATTTTGGCACTTATA	(SEQ ID NO. 3859)
4SB8_HP0315S311	CUACUACUACTAGGATTTTCAAAATCTCAGT	(SEQ ID NO. 3860)
4SB9_HP0316S312	CUACUACUATCAAAACGCTAAAGCATAACAT	(SEQ ID NO. 3861)
4SB10_HP0317S313	CUACUACUAAAGCTTAGTAAGCGAACACATA	(SEQ ID NO. 3862)
4SB11_HP0318S314	CUACUACUATTTATTTCTTTGTGAGCGAAATT	(SEQ ID NO. 3863)
4SB12_HP0319S315	CUACUACUAGCTTAATCTCTAGCGGAAATT	(SEQ ID NO. 3864)
4SC1_HP0320S316	CUACUACUATTAACCTTTCTTTGTTGCTTTT	(SEQ ID NO. 3865)
4SC2_HP0321S317	CUACUACUAGTTTATAGGTTTCGTTT	(SEQ ID NO. 3866)
4SC3_HP0322S318	CUACUACUATTTATGCATTAGGTTTATATC	(SEQ ID NO. 3867)
4SC4_HP0323S319	CUACUACUATTTAAACCCCAACGCAACTCC	(SEQ ID NO. 3868)
4SC5_HP0324S320	CUACUACUATTTAGAAAGTGTAAATTATACC	(SEQ ID NO. 3869)

4SC6_HP0325S321	CUACUACUATTTTAATAAGGCATTTGGGTT	(SEQ ID NO. 3870)
4SC7_HP0326S322	CUACUACUAGAAATAATTTTTTTCAAATCT	(SEQ ID NO. 3871)
4SC8_HP0327S323	CUACUACUACCCCTAAAGTTTTAGAAGAGAT	(SEQ ID NO. 3872)
4SC9_HP0328S324	CUACUACUAGAGTTTATAGACGTTCTTTTG	(SEQ ID NO. 3873)
4SC10_HP0329S325	CUACUACUATCATTCAGGGTTAAATCGTTT	(SEQ ID NO. 3874)
4SC11_HP0330S326	CUACUACUATGATTTATTTTTTATGATTGA	(SEQ ID NO. 3875)
4SC12_HP0331S327	CUACUACUACTCATGAAAAATATCCCTTTTA	(SEQ ID NO. 3876)
4SD1_HP0332S328	CUACUACUACTATCTAGGTAATAATATCTC	(SEQ ID NO. 3877)
4SD2_HP0333S329	CUACUACUAAATCACGCTAACACCAATG	(SEQ ID NO. 3878)
4SD3_HP0334S330	CUACUACUATCCCCTAATGATTTTTCAAAAC	(SEQ ID NO. 3879)
4SD4_HP0335S331	CUACUACUATTCACACGCTTTAACATAGTA	(SEQ ID NO. 3880)
4SD5_HP0336S332	CUACUACUATCAAAATCTAGTAGTTGTTTAA	(SEQ ID NO. 3881)
4SD6_HP0337S333	CUACUACUACTATTTTCCTTGCTCATGTGTC	(SEQ ID NO. 3882)
4SD7_HP0338S334	CUACUACUATTTTAAATTCCTTATTTATT	(SEQ ID NO. 3883)
4SD8_HP0339S335	CUACUACUATCCAATTTCAAATTTCCATA	(SEQ ID NO. 3884)
4SD9_HP0340S336	CUACUACUATTTATTCCTCCCAAGCAAAATACA	(SEQ ID NO. 3885)
4SD10_HP0341S337	CUACUACUATTAAGCCTCCCTAAATTAATCT	(SEQ ID NO. 3886)
4SD11_HP0342S338	CUACUACUATTTATTTTATCCCTCTTGTT	(SEQ ID NO. 3887)
4SD12_HP0343S339	CUACUACUATCTAGACATCAGCATCAATA	(SEQ ID NO. 3888)
4SE1_HP0344S340	CUACUACUACATCATTTTCCATACCTCACTC	(SEQ ID NO. 3889)
4SE2_HP0345S341	CUACUACUAAATCTTTTATAATATCGGTAGG	(SEQ ID NO. 3890)
4SE3_HP0346S342	CUACUACUATTTATTTGATGATCTTTTGGTT	(SEQ ID NO. 3891)
4SE4_HP0347S343	CUACUACUATCAATAAAAAAGGATAGATC	(SEQ ID NO. 3892)
4SE5_HP0348S344	CUACUACUACACTACAACAACCTTTTAACA	(SEQ ID NO. 3893)
4SE6_HP0349S345	CUACUACUATTTGTAGATTAGGATTTAGAA	(SEQ ID NO. 3894)
4SE7_HP0350S346	CUACUACUATCGTTTAGATCTTTTGAAACA	(SEQ ID NO. 3895)
4SE8_HP0351S347	CUACUACUAAACCTTCTATCTTTTAACCTTT	(SEQ ID NO. 3896)
4SE9_HP0352S348	CUACUACUACTATTCAATGACATCTTCTCTC	(SEQ ID NO. 3897)
4SE10_HP0353S349	CUACUACUACAAAATCACACCTTAAATTT	(SEQ ID NO. 3898)
4SE11_HP0354S350	CUACUACUATTTTCATCTCTCTTGTCTCTAAA	(SEQ ID NO. 3899)
4SE12_HP0355S351	CUACUACUACGCCCTAATCGATCTTTAATA	(SEQ ID NO. 3900)
4SF1_HP0356S352	CUACUACUAGTTATTTTATTTGCCCTATTAA	(SEQ ID NO. 3901)

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4SF2_HP0357S353	CUACUACUATTAAGGTTTTTATGGGTGGG	(SEQ ID NO. 3902)
4SF3_HP0358S354	CUACUACUATTAATAAAGCCCTTAAGCCCC	(SEQ ID NO. 3903)
4SF4_HP0359S355	CUACUACUATAGCTCAGCTGGGAGAGCGCC	(SEQ ID NO. 3904)
4SF5_HP0360S356	CUACUACUATTAATTGAAACCTCAAAAGGTG	(SEQ ID NO. 3905)
4SF6_HP0361S357	CUACUACUACCTTTTGAGGTTTCAATAATA	(SEQ ID NO. 3906)
4SF7_HP0362S358	CUACUACUATCAATAACGCTTTTAAATGAA	(SEQ ID NO. 3907)
4SF8_HP0363S359	CUACUACUATTAATTGCACCCCATCTACAAC	(SEQ ID NO. 3908)
4SF9_HP0364S360	CUACUACUACCTTAATAAATCATCAAAACTC	(SEQ ID NO. 3909)
4SF10_HP0365S361	CUACUACUATAGGGCTTCAAAATCTTAATCA	(SEQ ID NO. 3910)
4SF11_HP0366S362	CUACUACUAACTCATCTCTATTTTAAAACTC	(SEQ ID NO. 3911)
4SF12_HP0367S363	CUACUACUATCGCTATAAGCAAACTCTTTC	(SEQ ID NO. 3912)
4SG1_HP0368S364	CUACUACUAAAAAATAATTAATCTAATCCTA	(SEQ ID NO. 3913)
4SG2_HP0369S365	CUACUACUATTTCTTAAGTCCATCAATTA	(SEQ ID NO. 3914)
4SG3_HP0370S366	CUACUACUAACTTAATAAATTTCTTCTTAA	(SEQ ID NO. 3915)
4SG4_HP0371S367	CUACUACUATTAAGCTTTTCAACTTTTGAT	(SEQ ID NO. 3916)
4SG5_HP0372S368	CUACUACUATCACTTTTAAATTTTAGGCAA	(SEQ ID NO. 3917)
4SG6_HP0373S369	CUACUACUACCTAAAAAATCCACCCGTAAT	(SEQ ID NO. 3918)
4SG7_HP0374S370	CUACUACUACCCCTAAACTTGTGCGATAC	(SEQ ID NO. 3919)
4SG8_HP0375S371	CUACUACUATCAAGGCCCATTAACACAAC	(SEQ ID NO. 3920)
4SG9_HP0376S372	CUACUACUATACTATTCTCTTGAGGTTTTTA	(SEQ ID NO. 3921)
4SG10_HP0377S373	CUACUACUAAAGGCTTTCTAGTTAGACTTG	(SEQ ID NO. 3922)
4SG11_HP0378S374	CUACUACUATGGTTATCTTAAAGCTAATT	(SEQ ID NO. 3923)
4SG12_HP0379S375	CUACUACUACCAATTTTACAACCCAATTT	(SEQ ID NO. 3924)
4SH1_HP0380S376	CUACUACUAGGTTTGTAAAAATGGGGTAA	(SEQ ID NO. 3925)
4SH2_HP0381S377	CUACUACUATTTATCTTAAAAAACTTTTTTA	(SEQ ID NO. 3926)
4SH3_HP0382S378	CUACUACUAAAAAGGGTCATTCAATTTTCATA	(SEQ ID NO. 3927)
4SH4_HP0383S379	CUACUACUATTAATTGGATTTTATAAAGCCA	(SEQ ID NO. 3928)
4SH5_HP0384S380	CUACUACUACGATTACTTTTCCACCACAACAC	(SEQ ID NO. 3929)
4SH6_HP0385S381	CUACUACUAAATGTTTTTAATGGTTTATGAC	(SEQ ID NO. 3930)
4SH7_HP0386S382	CUACUACUAGGAGCGGATTAAAGTGATAGAAC	(SEQ ID NO. 3931)
4SH8_HP0387S383	CUACUACUATTAATAAATAATATCCACAGGATC	(SEQ ID NO. 3932)
4SH9_HP0388S384	CUACUACUATTTCAAAAAAACTTAAGTTTTT	(SEQ ID NO. 3933)

4SH10_HP0389S385	CUACUACUAAAAATAACGCTTAAGCTTTTTT	(SEQ ID NO. 3934)
4SH11_HP0390S386	CUACUACUAGATTTTCCTATTTCAACACTTT	(SEQ ID NO. 3935)
4SH12_HP0391S387	CUACUACUAGTTTTTTAGAAAGTCTTTTTTTA	(SEQ ID NO. 3936)
4RA1_HP0296R292	CAUCAUCAUAAATGTCATACGCAATATTCA	(SEQ ID NO. 3937)
4RA2_HP0297R293	CAUCAUCAUAATGGCACACAAAGAAAGGTC	(SEQ ID NO. 3938)
4RA3_HP0298R294	CAUCAUCAUGACTGGCTTATGAATAATGTT	(SEQ ID NO. 3939)
4RA4_HP0299R295	CAUCAUCAUATGCTGAGTTTTATCATTAAG	(SEQ ID NO. 3940)
4RA5_HP0300R296	CAUCAUCAUATGGAGTCTTTTAGAGAGTTT	(SEQ ID NO. 3941)
4RA6_HP0301R297	CAUCAUCAUGCATGATTTTAGAAGTTAAAG	(SEQ ID NO. 3942)
4RA7_HP0302R298	CAUCAUCAUGATGAAGCTCTTAGAAATTA	(SEQ ID NO. 3943)
4RA8_HP0303R299	CAUCAUCAUGATTTTTTAAGCTGTGTTTGTA	(SEQ ID NO. 3944)
4RA9_HP0304R300	CAUCAUCAUATGAAAAAGATTTGTTTGT	(SEQ ID NO. 3945)
4RA10_HP0305R301	CAUCAUCAUAAATGAAAAAATGGTTTGGT	(SEQ ID NO. 3946)
4RA11_HP0306R302	CAUCAUCAUTCATGGAGTTGTTGCACAGCA	(SEQ ID NO. 3947)
4RA12_HP0307R303	CAUCAUCAUAAAGGTGTGTGAATTTTTTGA	(SEQ ID NO. 3948)
4RB1_HP0308R304	CAUCAUCAUAAATCCCATGTGCCAAATCC	(SEQ ID NO. 3949)
4RB2_HP0309R305	CAUCAUCAUGGGAGTGGATCTTGAAAAACAA	(SEQ ID NO. 3950)
4RB3_HP0310R306	CAUCAUCAUTTATGGCAAAAGAAATTTTAG	(SEQ ID NO. 3951)
4RB4_HP0311R307	CAUCAUCAUTGGAAGATGTGCGTTTATGCG	(SEQ ID NO. 3952)
4RB5_HP0312R308	CAUCAUCAUATGCCCAAAATCCCTATCAGG	(SEQ ID NO. 3953)
4RB6_HP0313R309	CAUCAUCAUAAATGCGCGTGTGTTGTTGCTT	(SEQ ID NO. 3954)
4RB7_HP0314R310	CAUCAUCAUATGCGGATGTTGTCATTTTTTT	(SEQ ID NO. 3955)
4RB8_HP0315R311	CAUCAUCAUAAAGGTTTTTGAAAAATGTATGC	(SEQ ID NO. 3956)
4RB9_HP0316R312	CAUCAUCAUAGGAATAAGCATGCGCTAACAC	(SEQ ID NO. 3957)
4RB10_HP0317R313	CAUCAUCAUAAAAACATGAAAAAACACATC	(SEQ ID NO. 3958)
4RB11_HP0318R314	CAUCAUCAUATGCTTAATCGTATCATAGAA	(SEQ ID NO. 3959)
4RB12_HP0319R315	CAUCAUCAUAGCATGCACACTCTCATTAAG	(SEQ ID NO. 3960)
4RC1_HP0320R316	CAUCAUCAUGTATGGGCGGATTCACAAGCA	(SEQ ID NO. 3961)
4RC2_HP0321R317	CAUCAUCAUCCTAATGCATAATGATTTTAA	(SEQ ID NO. 3962)
4RC3_HP0322R318	CAUCAUCAUATGAAAAATGATTTCTATTCAAC	(SEQ ID NO. 3963)
4RC4_HP0323R319	CAUCAUCAUTGATGTAAACAAGTTTAAAA	(SEQ ID NO. 3964)
4RC5_HP0324R320	CAUCAUCAUATGAAACTTAACCTTGCAGGAG	(SEQ ID NO. 3965)

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4RC6_HP0325R321	CAUCAUAGGCTAGTGGATGAAAAAGC	(SEQ ID NO. 3966)
4RC7_HP0326R322	CAUCAUATGAGAGCGATCGCTATTGTT	(SEQ ID NO. 3967)
4RC8_HP0327R323	CAUCAUTTTAGAGATTGAAAAAAT	(SEQ ID NO. 3968)
4RC9_HP0328R324	CAUCAUCCTGAATGAAAAAGCGATAAC	(SEQ ID NO. 3969)
4RC10_HP0329R325	CAUCAUAGGCATGCAAAAAGATTACCA	(SEQ ID NO. 3970)
4RC11_HP0330R326	CAUCAUAATTTGGCATTACCGTTTAT	(SEQ ID NO. 3971)
4RC12_HP0331R327	CAUCAUGGAATCATATGGCAATAGTAG	(SEQ ID NO. 3972)
4RD1_HP0332R328	CAUCAUTTCATGAGTTTGTGTTT	(SEQ ID NO. 3973)
4RD2_HP0333R329	CAUCAUAGTGAATCAACGAATGAAAG	(SEQ ID NO. 3974)
4RD3_HP0334R330	CAUCAUTGTGGTGTAGCGTGATTTTG	(SEQ ID NO. 3975)
4RD4_HP0335R331	CAUCAUGGGGGTTAATGGCAGAGCCA	(SEQ ID NO. 3976)
4RD5_HP0336R332	CAUCAUCGATGTAGGGGTGGAACGG	(SEQ ID NO. 3977)
4RD6_HP0337R333	CAUCAUAAAAACGGATAACCATGAAAAT	(SEQ ID NO. 3978)
4RD7_HP0338R334	CAUCAUCGACAAATGAGCAAGGAAAATA	(SEQ ID NO. 3979)
4RD8_HP0339R335	CAUCAUGTGGATTCAGAGGGTTTCG	(SEQ ID NO. 3980)
4RD9_HP0340R336	CAUCAUCAAGGAATATGGAAATTTGA	(SEQ ID NO. 3981)
4RD10_HP0341R337	CAUCAUATGCTAAAGAATTTCAAAAAG	(SEQ ID NO. 3982)
4RD11_HP0342R338	CAUCAUGTGAGCGTGGAAATTTGCTTCT	(SEQ ID NO. 3983)
4RD12_HP0343R339	CAUCAUATGTCTTATTTTTTAAATC	(SEQ ID NO. 3984)
4RE1_HP0344R340	CAUCAUGGGGTTGTTTTTGCATAT	(SEQ ID NO. 3985)
4RE2_HP0345R341	CAUCAUGAGTGAGTATGGAAAATGATG	(SEQ ID NO. 3986)
4RE3_HP0346R342	CAUCAUTGTGGATAAGTTCTTGGATTG	(SEQ ID NO. 3987)
4RE4_HP0347R343	CAUCAUTGTGTAGTGCCTTTTGTGA	(SEQ ID NO. 3988)
4RE5_HP0348R344	CAUCAUAAAATCCTAATCTAACAAATGA	(SEQ ID NO. 3989)
4RE6_HP0349R345	CAUCAUTATGGATAGAGCCAAATTTAT	(SEQ ID NO. 3990)
4RE7_HP0350R346	CAUCAUTAAAATAATGGCTGAAAATCT	(SEQ ID NO. 3991)
4RE8_HP0351R347	CAUCAUTAATAATTGGATTAAAGGTAT	(SEQ ID NO. 3992)
4RE9_HP0352R348	CAUCAUAATGCAACCAAGCTTACCCC	(SEQ ID NO. 3993)
4RE10_HP0353R349	CAUCAUATGTCTATTGAATAGCCGTAAG	(SEQ ID NO. 3994)
4RE11_HP0354R350	CAUCAUGTGATTTTGCAAAATAAACT	(SEQ ID NO. 3995)
4RE12_HP0355R351	CAUCAUGACAAGAGAGATGAAAACAAA	(SEQ ID NO. 3996)
4RF1_HP0356R352	CAUCAUCCTTCTATGGCAAAACATAAGA	(SEQ ID NO. 3997)

4RF2_HP0357R353	CAUCAUAUAATGGCGACATTTTAGTTAG	(SEQ ID NO. 3998)
4RF3_HP0358R354	CAUCAUAUATGAAAAAATTCTTTATACC	(SEQ ID NO. 3999)
4RF4_HP0359R355	CAUCAUAUATGTGGAGAAATAGCGGATC	(SEQ ID NO. 4000)
4RF5_HP0360R356	CAUCAUAAGGGTTTATTATGGCATTATTA	(SEQ ID NO. 4001)
4RF6_HP0361R357	CAUCAUCGTTATTGAATGCGTTGTTT	(SEQ ID NO. 4002)
4RF7_HP0362R358	CAUCAUAUAAAGCATGATTAAACACTAT	(SEQ ID NO. 4003)
4RF8_HP0363R359	CAUCAUGGGCTTGTGTTGAATAGTATTA	(SEQ ID NO. 4004)
4RF9_HP0364R360	CAUCAUGGAACAATAATGGAAGTTTCAC	(SEQ ID NO. 4005)
4RF10_HP0365R361	CAUCAUGAAGTGGCGAAATTGGTAGAC	(SEQ ID NO. 4006)
4RF11_HP0366R362	CAUCAUAUAGAGAGTTTGCTTATAGC	(SEQ ID NO. 4007)
4RF12_HP0367R363	CAUCAUAUATGTCTAAGATTTCAAATAAT	(SEQ ID NO. 4008)
4RG1_HP0368R364	CAUCAUGTGCTTAACGCTATAGATGGA	(SEQ ID NO. 4009)
4RG2_HP0369R365	CAUCAUGTGAAGTTATTAAAAAATACG	(SEQ ID NO. 4010)
4RG3_HP0370R366	CAUCAUTCCATGAATAAAGTGAATAAA	(SEQ ID NO. 4011)
4RG4_HP0371R367	CAUCAUAUGGAATAGATCGTTATGAACC	(SEQ ID NO. 4012)
4RG5_HP0372R368	CAUCAUAAGGCTTTGTGCGTATGGGATT	(SEQ ID NO. 4013)
4RG6_HP0373R369	CAUCAUCAATGCTAAGATTCTGTTAGTAA	(SEQ ID NO. 4014)
4RG7_HP0374R370	CAUCAUAUATGCGTTTGTCTATCACCCCT	(SEQ ID NO. 4015)
4RG8_HP0375R371	CAUCAUAUAGAAGTTAATGTTAGAGATG	(SEQ ID NO. 4016)
4RG9_HP0376R372	CAUCAUCAUCCAATGGATTTAATCAATGAA	(SEQ ID NO. 4017)
4RG10_HP0377R373	CAUCAUAUATGTTTTCACCTTTCTTATGTT	(SEQ ID NO. 4018)
4RG11_HP0378R374	CAUCAUAUATGAAGAAATCTCAAAAGCC	(SEQ ID NO. 4019)
4RG12_HP0379R375	CAUCAUGATAAACCATGTTCCCAACCCCT	(SEQ ID NO. 4020)
4RH1_HP0380R376	CAUCAUAUATGTATGTTGAAAAAATCTC	(SEQ ID NO. 4021)
4RH2_HP0381R377	CAUCAUAUATGACCCCTTTCGCAAGCCCTA	(SEQ ID NO. 4022)
4RH3_HP0382R378	CAUCAUAUATGCTTGACATATGGATAGAT	(SEQ ID NO. 4023)
4RH4_HP0383R379	CAUCAUAUATTTGTCTATGCCCATCTCTTA	(SEQ ID NO. 4024)
4RH5_HP0384R380	CAUCAUAUAATGCAAAAAAATATATAAA	(SEQ ID NO. 4025)
4RH6_HP0385R381	CAUCAUAUTATGATGCAATCTTTAAGTTT	(SEQ ID NO. 4026)
4RH7_HP0386R382	CAUCAUAUGTTGTCAATAAACCATTAATAA	(SEQ ID NO. 4027)
4RH8_HP0387R383	CAUCAUAUAAATCTCATCATGTTCTATC	(SEQ ID NO. 4028)
4RH9_HP0388R384	CAUCAUAUATGAAAGACACTCTGTTTAAT	(SEQ ID NO. 4029)

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4RH10_HP0389R385	CAUCAUCAATGTTTACATTACGAGAGTT	(SEQ ID NO. 4030)
4RH11_HP0390R386	CAUCAUCAATGCAAAAAGTTACTTTTAA	(SEQ ID NO. 4031)
4RH12_HP0391R387	CAUCAUCAUAATCGTGAGCAACCAATTAAA	(SEQ ID NO. 4032)
5SA1_HP0392S388	CUACUACUACTCACGATTGGTCTCTCTCTA	(SEQ ID NO. 4033)
5SA2_HP0393S389	CUACUACUAAATTACGCATTCTTGTCATAAA	(SEQ ID NO. 4034)
5SA3_HP0394S390	CUACUACUAAATTTAGGCGTCCTTATTTTGA	(SEQ ID NO. 4035)
5SA4_HP0395S391	CUACUACUAGCATCTTACTCTTTTGAACAAA	(SEQ ID NO. 4036)
5SA5_HP0396S392	CUACUACUATCTTTTATAGATCTTCTTTGT	(SEQ ID NO. 4037)
5SA6_HP0397S393	CUACUACUAACTTAAATAACACATAATG	(SEQ ID NO. 4038)
5SA7_HP0398S394	CUACUACUATGAATTTAAAAACAGCATGA	(SEQ ID NO. 4039)
5SA8_HP0399S395	CUACUACUACTTTAGAGTTTCTTTTAAAGA	(SEQ ID NO. 4040)
5SA9_HP0400S396	CUACUACUAGTGTAAATCGTGTGATTTT	(SEQ ID NO. 4041)
5SA10_HP0401S397	CUACUACUATTAATTTCCATTAAAGACTCCC	(SEQ ID NO. 4042)
5SA11_HP0402S398	CUACUACUATCTATCACATATATATCTTTA	(SEQ ID NO. 4043)
5SA12_HP0403S399	CUACUACUAAATTAAGCTCTCCAACATC	(SEQ ID NO. 4044)
5SB1_HP0404S400	CUACUACUACGCTTTTAAATGTTGTCTCCG	(SEQ ID NO. 4045)
5SB2_HP0405S401	CUACUACUATAGCTTAACGCAATTTTAA	(SEQ ID NO. 4046)
5SB3_HP0406S402	CUACUACUACGTTAAATTTAAACTACTTTT	(SEQ ID NO. 4047)
5SB4_HP0407S403	CUACUACUAACTCTTTTAAAGCCCAATAA	(SEQ ID NO. 4048)
5SB5_HP0408S404	CUACUACUATCATCGCTCATTTCTTTATTTT	(SEQ ID NO. 4049)
5SB6_HP0409S405	CUACUACUATCATTCCTCATTCATCGTTCC	(SEQ ID NO. 4050)
5SB7_HP0410S406	CUACUACUAACTACTTTCTGTTTTCATTT	(SEQ ID NO. 4051)
5SB8_HP0411S407	CUACUACUATTAATGAGATGGGGTGAAG	(SEQ ID NO. 4052)
5SB9_HP0412S408	CUACUACUATCAATCTTTAGAAAAAAAC	(SEQ ID NO. 4053)
5SB10_HP0413S409	CUACUACUATTTGTTTAGACTTTAACAACCT	(SEQ ID NO. 4054)
5SB11_HP0414S410	CUACUACUACTAATTTAATGCGGTGTTCT	(SEQ ID NO. 4055)
5SB12_HP0415S411	CUACUACUATCTACCAATAATTTTCAATTT	(SEQ ID NO. 4056)
5SC1_HP0416S412	CUACUACUATCTGAAATTTATTTGATAGT	(SEQ ID NO. 4057)
5SC2_HP0417S413	CUACUACUATTAGCTGATCAAACTTCTGTC	(SEQ ID NO. 4058)
5SC3_HP0418S414	CUACUACUAAAAATGAGCATGATTTACCATA	(SEQ ID NO. 4059)
5SC4_HP0419S415	CUACUACUATTAATTAACGCTTGCTTGGTT	(SEQ ID NO. 4060)
5SC5_HP0420S416	CUACUACUACTACTCTTCTTTAAATTTGAA	(SEQ ID NO. 4061)

5SC6_HP0421S417	CUACUACUATTATGATAAGGTTTAAAGAG	(SEQ ID NO. 4062)
5SC7_HP0422S418	CUACUACUATTAAAGAAATCGTGCGCAAATA	(SEQ ID NO. 4063)
5SC8_HP0423S419	CUACUACUAGAGTGGGGGGTTTATTCTA	(SEQ ID NO. 4064)
5SC9_HP0424S420	CUACUACUATGTTGGGGTGTGAATTTTATT	(SEQ ID NO. 4065)
5SC10_HP0425S421	CUACUACUATTATAAGGCTTGTAAAGCTTTT	(SEQ ID NO. 4066)
5SC11_HP0426S422	CUACUACUAGCAATCTTTAATCATCTCTAGA	(SEQ ID NO. 4067)
5SC12_HP0427S423	CUACUACUATGGGCTTATCGAATCAAATT	(SEQ ID NO. 4068)
5SD1_HP0428S424	CUACUACUATCATGGAATCCAGTTCAACTT	(SEQ ID NO. 4069)
5SD2_HP0429S425	CUACUACUAAAAAGTCATAATTGAAGGCT	(SEQ ID NO. 4070)
5SD3_HP0430S426	CUACUACUATTAATCGCATCCACTTTT	(SEQ ID NO. 4071)
5SD4_HP0431S427	CUACUACUACTTCTAACTCCATAAACTACC	(SEQ ID NO. 4072)
5SD5_HP0432S428	CUACUACUATCAAAGCATTACGCTAATAAA	(SEQ ID NO. 4073)
5SD6_HP0433S429	CUACUACUAACTCAGCATTTTTGAACCTTA	(SEQ ID NO. 4074)
5SD7_HP0434S430	CUACUACUATTAGGATTGGCGCTTCAAACC	(SEQ ID NO. 4075)
5SD8_HP0435S431	CUACUACUACACGCATAGAAAGAAATAAAA	(SEQ ID NO. 4076)
5SD9_HP0436S432	CUACUACUATACTCATAGGGTTTATATAGT	(SEQ ID NO. 4077)
5SD10_HP0437S433	CUACUACUAAATTAACCTTGATTTTCTATAT	(SEQ ID NO. 4078)
5SD11_HP0438S434	CUACUACUAAACCGCTAAAGCGATTGGCTT	(SEQ ID NO. 4079)
5SD12_HP0439S435	CUACUACUAGGAGCTATGAAGCAAGAAAA	(SEQ ID NO. 4080)
5SE1_HP0440S436	CUACUACUATCATTTCTTTTGCTTTTGTG	(SEQ ID NO. 4081)
5SE2_HP0441S437	CUACUACUACCTACTCCTTTGTCAAGTAAA	(SEQ ID NO. 4082)
5SE3_HP0442S438	CUACUACUAAATTTTCTCAAGCATAATAATT	(SEQ ID NO. 4083)
5SE4_HP0443S439	CUACUACUATCTAAAAATAACCATTTGACTTA	(SEQ ID NO. 4084)
5SE5_HP0444S440	CUACUACUATTTGTTTTCATCTTTTCATGTC	(SEQ ID NO. 4085)
5SE6_HP0445S441	CUACUACUAACTTCAATCGCGGCTCTACTAC	(SEQ ID NO. 4086)
5SE7_HP0446S442	CUACUACUACTTTATGATGCTAAAAATTCC	(SEQ ID NO. 4087)
5SE8_HP0447S443	CUACUACUATCATAAAAATTTGCCCTCTTT	(SEQ ID NO. 4088)
5SE9_HP0448S444	CUACUACUAAACATCAGCCTAGGAAGCCCAA	(SEQ ID NO. 4089)
5SE10_HP0449S445	CUACUACUACTCATCGTTTCTCCTTTTAGAT	(SEQ ID NO. 4090)
5SE11_HP0450S446	CUACUACUATTTTAGATAAACTTTTCTCT	(SEQ ID NO. 4091)
5SE12_HP0452S447	CUACUACUATGCTACTTTTAAAGAGTTT	(SEQ ID NO. 4092)
5SF1_HP0453S448	CUACUACUATGATTTTATTCATCCTCTCTG	(SEQ ID NO. 4093)

5SF2_HP0454S449	CUACUACUATTAGGTTTAAATGCTCTTTGCC	(SEQ ID NO. 4094)
5SF3_HP0455S450	CUACUACUAGCGTGAATTTTAAACAACAT	(SEQ ID NO. 4095)
5SF4_HP0456S451	CUACUACUATCACACAGAACTTGGATAATA	(SEQ ID NO. 4096)
5SF5_HP0457S452	CUACUACUATCCTTTTAAAGCGTAAATGAA	(SEQ ID NO. 4097)
5SF6_HP0458S453	CUACUACUATTAAAGGCGCTTTCTAACATT	(SEQ ID NO. 4098)
5SF7_HP0459S454	CUACUACUAGTTTTCATTTAAGCACCTTT	(SEQ ID NO. 4099)
5SF8_HP0460S455	CUACUACUATCAAAATTTGCGAGCTTAAAGC	(SEQ ID NO. 4100)
5SF9_HP0461S456	CUACUACUATTAGCCTTTGTGTCTCTTT	(SEQ ID NO. 4101)
5SF10_HP0462S457	CUACUACUATTTTCATTTGGGTTTGACTTG	(SEQ ID NO. 4102)
5SF11_HP0463S458	CUACUACUACAGGTTTGTAGAGAATAATTT	(SEQ ID NO. 4103)
5SF12_HP0464S459	CUACUACUATTAGGCATGCGGATTTCCCTTG	(SEQ ID NO. 4104)
5SG1_HP0465S460	CUACUACUATGTAAAAATAAAATCATGGT	(SEQ ID NO. 4105)
5SG2_HP0466S461	CUACUACUATTAGGAGTCTTTTAAATCAT	(SEQ ID NO. 4106)
5SG3_HP0467S462	CUACUACUACCTTTATGAGTATTTTTCAT	(SEQ ID NO. 4107)
5SG4_HP0468S463	CUACUACUAACTCTTAAATGAAAGTAACCTT	(SEQ ID NO. 4108)
5SG5_HP0469S464	CUACUACUACCTTTAGCTTTTGTGCAGATTT	(SEQ ID NO. 4109)
5SG6_HP0470S465	CUACUACUACTTGTATTATTTAAAGCCTTAA	(SEQ ID NO. 4110)
5SG7_HP0471S466	CUACUACUATTAATTTTGTAGCCGGCTCAT	(SEQ ID NO. 4111)
5SG8_HP0472S467	CUACUACUATTAGAAAGTAAAGACATAATC	(SEQ ID NO. 4112)
5SG9_HP0473S468	CUACUACUATTAATCCACAATATAGCCGTA	(SEQ ID NO. 4113)
5SG10_HP0474S469	CUACUACUATTATCATATAAAACGAGCTTTG	(SEQ ID NO. 4114)
5SG11_HP0475S470	CUACUACUATTTCTAAAAATTTTGTGTTTGA	(SEQ ID NO. 4115)
5SG12_HP0476S471	CUACUACUAAAGAGCCAAATTTTGTGTTT	(SEQ ID NO. 4116)
5SH1_HP0477S472	CUACUACUACCTTAAACTATAAACGTAAC	(SEQ ID NO. 4117)
5SH2_HP0478S473	CUACUACUAAATTAATCCCTAAAGCCAAAAG	(SEQ ID NO. 4118)
5SH3_HP0479S474	CUACUACUAGAAGTATAACACAATATTATA	(SEQ ID NO. 4119)
5SH4_HP0480S475	CUACUACUATTAATTTTTCGCCCTTTTCCT	(SEQ ID NO. 4120)
5SH5_HP0481S476	CUACUACUAAATTTTAGAATTTTCTAACACA	(SEQ ID NO. 4121)
5SH6_HP0482S477	CUACUACUACTAATCTTTGCCCTGCTCTTG	(SEQ ID NO. 4122)
5SH7_HP0483S478	CUACUACUACATCTTACCCCTTTAAAAAGT	(SEQ ID NO. 4123)
5SH8_HP0484S479	CUACUACUATTTATGAAAGCGGCTTATTAG	(SEQ ID NO. 4124)
5SH9_HP0485S480	CUACUACUATTTATTGCTTCTGCTAAAAG	(SEQ ID NO. 4125)

SSH10_HP0486S481	CUACUACUATTAGAACTATAAATAATGTG	(SEQ ID NO. 4126)
SSH11_HP0487S482	CUACUACUATAAAATGCTAGTAATCCTAA	(SEQ ID NO. 4127)
SSH12_HP0488S483	CUACUACUATTAAATTTTGTGGTAGGAT	(SEQ ID NO. 4128)
5RA1_HP0392R388	CAUCAUCAUATGGATGATTGCAAGAAATA	(SEQ ID NO. 4129)
5RA2_HP0393R389	CAUCAUCAUATGGCAGAAAAAACAGCTAAC	(SEQ ID NO. 4130)
5RA3_HP0394R390	CAUCAUCAUAAAGAGTAAGATGCTAGAAA	(SEQ ID NO. 4131)
5RA4_HP0395R391	CAUCAUCAUATGTTAGATTATCGCCAAAAA	(SEQ ID NO. 4132)
5RA5_HP0396R392	CAUCAUCAUGGTAGTTGGATGCGAGATTTT	(SEQ ID NO. 4133)
5RA6_HP0397R393	CAUCAUCAUAATGTATCAAGTAGCCATTG	(SEQ ID NO. 4134)
5RA7_HP0398R394	CAUCAUCAUATGAGATTTAAGGGTGTGTT	(SEQ ID NO. 4135)
5RA8_HP0399R395	CAUCAUCAUAATGAGCAAGATAGCAGAGC	(SEQ ID NO. 4136)
5RA9_HP0400R396	CAUCAUCAUATGGAAATTAAAAATGGCTAAG	(SEQ ID NO. 4137)
5RA10_HP0401R397	CAUCAUCAUTGTGATAGAGCTTGACATTAA	(SEQ ID NO. 4138)
5RA11_HP0402R398	CAUCAUCAUAATGAAGTGAAGCATTAAATGA	(SEQ ID NO. 4139)
5RA12_HP0403R399	CAUCAUCAUCGTTATTGCACACCTTAATAG	(SEQ ID NO. 4140)
5RB1_HP0404R400	CAUCAUCAUATGAATGTGTTGAAAAAATA	(SEQ ID NO. 4141)
5RB2_HP0405R401	CAUCAUCAUGTGCAAGCGTTTAAATAGG	(SEQ ID NO. 4142)
5RB3_HP0406R402	CAUCAUCAUAATTTGGATATTTTAGATTG	(SEQ ID NO. 4143)
5RB4_HP0407R403	CAUCAUCAUATGTCCATTTCACGCAGAAGT	(SEQ ID NO. 4144)
5RB5_HP0408R404	CAUCAUCAUTATAAGGATAAAAGATGAATA	(SEQ ID NO. 4145)
5RB6_HP0409R405	CAUCAUCAUCGATGATTTTAGTATTAGATT	(SEQ ID NO. 4146)
5RB7_HP0410R406	CAUCAUCAUAGGAATTTAATGAAAAAAGGT	(SEQ ID NO. 4147)
5RB8_HP0411R407	CAUCAUCAUTGAGTGCGCTTTTGATTTTA	(SEQ ID NO. 4148)
5RB9_HP0412R408	CAUCAUCAUGGAGTTATGGATTCTTTAGAG	(SEQ ID NO. 4149)
5RB10_HP0413R409	CAUCAUCAUTTCATGAAAGTCAATAAGGG	(SEQ ID NO. 4150)
5RB11_HP0414R410	CAUCAUCAUGGTCTATGAAAAAAATTGATG	(SEQ ID NO. 4151)
5RB12_HP0415R411	CAUCAUCAUATGCGTTTATTATTGTGGTGG	(SEQ ID NO. 4152)
5RC1_HP0416R412	CAUCAUCAUGATGATTTTCAAAATTTTGCT	(SEQ ID NO. 4153)
5RC2_HP0417R413	CAUCAUCAUGATTATAAAGATGCAAAAATC	(SEQ ID NO. 4154)
5RC3_HP0418R414	CAUCAUCAUATGCGATTAGGGGTGAATGAA	(SEQ ID NO. 4155)
5RC4_HP0419R415	CAUCAUCAUGGTAAATCATGCTCATTTGTA	(SEQ ID NO. 4156)
5RC5_HP0420R416	CAUCAUCAUAAAGATAGTGCAAGAATCAGTC	(SEQ ID NO. 4157)

5RC6_HP0421R417	CAUCAUCAUAGAAGAGTAGTTAAATGGTTA	(SEQ ID NO. 4158)
5RC7_HP0422R418	CAUCAUCAUATGCAAGAAGTCCATGATTAT	(SEQ ID NO. 4159)
5RC8_HP0423R419	CAUCAUCAUTATGGGTTTTTCAAAATGAAAA	(SEQ ID NO. 4160)
5RC9_HP0424R420	CAUCAUCAUATGTTATTGGAATTATGATTTT	(SEQ ID NO. 4161)
5RC10_HP0425R421	CAUCAUCAUATGCCCTAAAAAGAGCTATTA	(SEQ ID NO. 4162)
5RC11_HP0426R422	CAUCAUCAUATGATGGCAAAAATAGATGTA	(SEQ ID NO. 4163)
5RC12_HP0427R423	CAUCAUCAUATACCCCATGTCATCTTTTTT	(SEQ ID NO. 4164)
5RD1_HP0428R424	CAUCAUCAUATGAGTGCCTTTTGGGTGAT	(SEQ ID NO. 4165)
5RD2_HP0429R425	CAUCAUCAUCTATGAATGAAATGGGAAAA	(SEQ ID NO. 4166)
5RD3_HP0430R426	CAUCAUCAUTTGTTGTTGAGCGATGGGCAT	(SEQ ID NO. 4167)
5RD4_HP0431R427	CAUCAUCAUCGATTAAGCAATGAGAGATTT	(SEQ ID NO. 4168)
5RD5_HP0432R428	CAUCAUCAUTTATGGAGTTAGAAGAAATTG	(SEQ ID NO. 4169)
5RD6_HP0433R429	CAUCAUCAUTTGAAACGCCCTACTATGCCC	(SEQ ID NO. 4170)
5RD7_HP0434R430	CAUCAUCAUGGTTCAAAAATGCTGAGTTTT	(SEQ ID NO. 4171)
5RD8_HP0435R431	CAUCAUCAUACGATGGATGAAGTCTTAAAA	(SEQ ID NO. 4172)
5RD9_HP0436R432	CAUCAUCAUAAATGAGAGCTTTTTTTAATT	(SEQ ID NO. 4173)
5RD10_HP0437R433	CAUCAUCAUGGATAGAGGAATGAGGAAAAA	(SEQ ID NO. 4174)
5RD11_HP0438R434	CAUCAUCAUATTTTTGCTTAACGCTATCAA	(SEQ ID NO. 4175)
5RD12_HP0439R435	CAUCAUCAUCATAGGCTAGTTGATGTCAAA	(SEQ ID NO. 4176)
5RE1_HP0440R436	CAUCAUCAUAAAGGAGTAGGAATGAAAGATA	(SEQ ID NO. 4177)
5RE2_HP0441R437	CAUCAUCAUTATGCTTGAGAAAATTTTTAA	(SEQ ID NO. 4178)
5RE3_HP0442R438	CAUCAUCAUAGATGGCATTGTCATATTGTTT	(SEQ ID NO. 4179)
5RE4_HP0443R439	CAUCAUCAUTGAAAGATGAAAACAAAACAT	(SEQ ID NO. 4180)
5RE5_HP0444R440	CAUCAUCAUTATGGCTTATATCGCTAATTT	(SEQ ID NO. 4181)
5RE6_HP0445R441	CAUCAUCAUAAATGCAATTCCCACTCAAAAA	(SEQ ID NO. 4182)
5RE7_HP0446R442	CAUCAUCAUGGACCATGCAAGAAAGAGTTT	(SEQ ID NO. 4183)
5RE8_HP0447R443	CAUCAUCAUCCCAACGAAGAAGTAGTGCC	(SEQ ID NO. 4184)
5RE9_HP0448R444	CAUCAUCAUTATGAAAATTATTAGCTTTGA	(SEQ ID NO. 4185)
5RE10_HP0449R445	CAUCAUCAUAGTGGAGTTTTTTGCAGACTC	(SEQ ID NO. 4186)
5RE11_HP0450R446	CAUCAUCAUAAACGATGAGCGGGAATGAAGA	(SEQ ID NO. 4187)
5RE12_HP0452R447	CAUCAUCAUAAATGGCAGATGAAACGAACG	(SEQ ID NO. 4188)
5RF1_HP0453R448	CAUCAUCAUTGCAATGATGATCTAGAAGAACT	(SEQ ID NO. 4189)

5RF2_HP0454R449	CAUCAUCAUGGTGTTGGAATTGAAATTAAT	(SEQ ID NO. 4190)
5RF3_HP0455R450	CAUCAUCAUAAAATGTTTTTGCAAGTTGTA	(SEQ ID NO. 4191)
5RF4_HP0456R451	CAUCAUCAUAAAAGGAAAACAATGATTAAAC	(SEQ ID NO. 4192)
5RF5_HP0457R452	CAUCAUCAUCCATGCAATTAGTTGGTATTT	(SEQ ID NO. 4193)
5RF6_HP0458R453	CAUCAUCAUATGCAAAAAGAGTCTTAGTA	(SEQ ID NO. 4194)
5RF7_HP0459R454	CAUCAUCAUGAAAGTCTTCTTAATGTTAGA	(SEQ ID NO. 4195)
5RF8_HP0460R455	CAUCAUCAUCATGTCTAATTGCAAGAACT	(SEQ ID NO. 4196)
5RF9_HP0461R456	CAUCAUCAUGTTAAATGAAGTTTATTCAA	(SEQ ID NO. 4197)
5RF10_HP0462R457	CAUCAUCAUTTGAGTGAGTGGCAACAATTT	(SEQ ID NO. 4198)
5RF11_HP0463R458	CAUCAUCAUAAATCCGCATGCCCTAATAACG	(SEQ ID NO. 4199)
5RF12_HP0464R459	CAUCAUCAUATGCCCATACAAATGAAATCACA	(SEQ ID NO. 4200)
5RG1_HP0465R460	CAUCAUCAUATGCCCTTTTAAAGCCCTA	(SEQ ID NO. 4201)
5RG2_HP0466R461	CAUCAUCAUAAATGGAAATCATTTTATTGAT	(SEQ ID NO. 4202)
5RG3_HP0467R462	CAUCAUCAUATGCGCATTATCATAAAGTTA	(SEQ ID NO. 4203)
5RG4_HP0468R463	CAUCAUCAUGATGAGCGTTTGGAAATTGCA	(SEQ ID NO. 4204)
5RG5_HP0469R464	CAUCAUCAUCGCATGCAAAAGAGAAATTAAGG	(SEQ ID NO. 4205)
5RG6_HP0470R465	CAUCAUCAUCATGAAAGAGCAAGAAATGGGA	(SEQ ID NO. 4206)
5RG7_HP0471R466	CAUCAUCAUATGGAAACAGCACACTTTAT	(SEQ ID NO. 4207)
5RG8_HP0472R467	CAUCAUCAUGAAGGATTTATTATGATTAAA	(SEQ ID NO. 4208)
5RG9_HP0473R468	CAUCAUCAUAGGGAGTTCTATGAAAAATAC	(SEQ ID NO. 4209)
5RG10_HP0474R469	CAUCAUCAUGAGCAATGGATCATGAGTTT	(SEQ ID NO. 4210)
5RG11_HP0475R470	CAUCAUCAUATGATAAAAGCGCGTTTAA	(SEQ ID NO. 4211)
5RG12_HP0476R471	CAUCAUCAUGAACAAATGAGTTTGATCGTTA	(SEQ ID NO. 4212)
5RH1_HP0477R472	CAUCAUCAUATGCAAAAAGCCTTATTACAT	(SEQ ID NO. 4213)
5RH2_HP0478R473	CAUCAUCAUGGGGGTAAATGCCCTTCAAACG	(SEQ ID NO. 4214)
5RH3_HP0479R474	CAUCAUCAUAAATCATGCATGTTGCTTGCT	(SEQ ID NO. 4215)
5RH4_HP0480R475	CAUCAUCAUAGGACATTTATGAAAAATATT	(SEQ ID NO. 4216)
5RH5_HP0481R476	CAUCAUCAUGAATGCATGCCAAATTTATTCA	(SEQ ID NO. 4217)
5RH6_HP0482R477	CAUCAUCAUATGCATATTAGCGAAGTCAAA	(SEQ ID NO. 4218)
5RH7_HP0483R478	CAUCAUCAUTTTTCTATGCACCCCTTATTTT	(SEQ ID NO. 4219)
5RH8_HP0484R479	CAUCAUCAUAGGGGTAAGATGTTTAACAAT	(SEQ ID NO. 4220)
5RH9_HP0485R480	CAUCAUCAUCAAGAAATGAAAAAATGGTT	(SEQ ID NO. 4221)

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5RH10_HP0486R481	CAUCAUCAUGAATGAAATTAAAGAAACGAA	(SEQ ID NO. 4222)
5RH11_HP0487R482	CAUCAUCAUGATATGCCTTTTGTATTTT	(SEQ ID NO. 4223)
5RH12_HP0488R483	CAUCAUCAUGAGGTGAAGTTACCCAAAGC	(SEQ ID NO. 4224)
6SA1_HP0489S484	CUACUACUACTCAAATCCTTGACTTTCCTTC	(SEQ ID NO. 4225)
6SA2_HP0490S485	CUACUACUACAATCACAATGAAATGTAATC	(SEQ ID NO. 4226)
6SA3_HP0491S486	CUACUACUAAAAAACCCCTAAACGGCTAAGC	(SEQ ID NO. 4227)
6SA4_HP0492S487	CUACUACUAACTACTTTTGTGAGGCATAG	(SEQ ID NO. 4228)
6SA5_HP0493S488	CUACUACUATTTTTCATTTTAACGCACCTTC	(SEQ ID NO. 4229)
6SA6_HP0494S489	CUACUACUACGCTTTAATCCTTTTAAACAA	(SEQ ID NO. 4230)
6SA7_HP0495S490	CUACUACUAGATTAAAGCGTTTGAAACCACT	(SEQ ID NO. 4231)
6SA8_HP0496S491	CUACUACUATCAGATGGCATTGAGCAGCTC	(SEQ ID NO. 4232)
6SA9_HP0497S492	CUACUACUATTAATAAATCTTGCTCAACCA	(SEQ ID NO. 4233)
6SA10_HP0498S493	CUACUACUATATTTCACCTTAAATTGCAAGA	(SEQ ID NO. 4234)
6SA11_HP0499S494	CUACUACUATTAAGGGTTTAAGCGTATTCC	(SEQ ID NO. 4235)
6SA12_HP0500S495	CUACUACUATCAGCCTTTATAGTGTGATG	(SEQ ID NO. 4236)
6SB1_HP0501S496	CUACUACUAAAAATCCCTTACACATCTAGT	(SEQ ID NO. 4237)
6SB2_HP0502S497	CUACUACUATCAATATCCGCTCCTTATTTT	(SEQ ID NO. 4238)
6SB3_HP0503S498	CUACUACUACACTAACTTTAATCAAACCTCA	(SEQ ID NO. 4239)
6SB4_HP0504S499	CUACUACUATTTTAAACTAAAGGATTTT	(SEQ ID NO. 4240)
6SB5_HP0505S500	CUACUACUATGTTAATTTTGAGTATTTT	(SEQ ID NO. 4241)
6SB6_HP0506S501	CUACUACUAAATAAGACATTAATAAACCTCT	(SEQ ID NO. 4242)
6SB7_HP0507S502	CUACUACUATCCTTTTAAACATTTTAAAC	(SEQ ID NO. 4243)
6SB8_HP0508S503	CUACUACUATGGTCTAAACATGTTATTTT	(SEQ ID NO. 4244)
6SB9_HP0509S504	CUACUACUATCCTTGCTTTAAATCCTTACAA	(SEQ ID NO. 4245)
6SB10_HP0510S505	CUACUACUAAAAACATTCAACCAACATCT	(SEQ ID NO. 4246)
6SB11_HP0511S506	CUACUACUATGTGCTTCTTTTCTATAAAC	(SEQ ID NO. 4247)
6SB12_HP0512S507	CUACUACUACATTTGTTTAGCATGAATAAG	(SEQ ID NO. 4248)
6SC1_HP0513S508	CUACUACUATTAATGCCTATTCTACCAAC	(SEQ ID NO. 4249)
6SC2_HP0514S509	CUACUACUACTACTCAGCCACCACATCAAT	(SEQ ID NO. 4250)
6SC3_HP0515S510	CUACUACUATTAAGCTCCAAAATTTTAAT	(SEQ ID NO. 4251)
6SC4_HP0516S511	CUACUACUACATCATATAATATCTTCACC	(SEQ ID NO. 4252)
6SC5_HP0517S512	CUACUACUATCAATCCCTATTCTCTATG	(SEQ ID NO. 4253)

6SC6_HP0518S513	CUACUACUATTTTCTTATTTTCCATTAT	(SEQ ID NO. 4254)
6SC7_HP0519S514	CUACUACUACTACAGAGCTTCCATGGCTTT	(SEQ ID NO. 4255)
6SC8_HP0520S515	CUACUACUAGTTTTCCTCAATCTTTAGTC	(SEQ ID NO. 4256)
6SC9_HP0522S516	CUACUACUAAACTTACTTTGAATCTTTTCAG	(SEQ ID NO. 4257)
6SC10_HP0523S517	CUACUACUACTACTCGTTATATCGCACTTG	(SEQ ID NO. 4258)
6SC11_HP0524S518	CUACUACUATTTGTCTTAATCACAGTTCAC	(SEQ ID NO. 4259)
6SC12_HP0525S519	CUACUACUAACTACCTGTGTTTGATATAAA	(SEQ ID NO. 4260)
6SD1_HP0526S520	CUACUACUATCTTATTTCCAAATTTAATTTT	(SEQ ID NO. 4261)
6SD2_HP0527S521	CUACUACUACTTGAATTAATTGCCACCTTT	(SEQ ID NO. 4262)
6SD3_HP0528S522	CUACUACUAAAGCCTTTTATTTATCTCTG	(SEQ ID NO. 4263)
6SD4_HP0529S523	CUACUACUAGGCTTATCCTTTAAACATAGA	(SEQ ID NO. 4264)
6SD5_HP0530S524	CUACUACUATCTTATTTATTTAATGCCTT	(SEQ ID NO. 4265)
6SD6_HP0531S525	CUACUACUATCATCTCTGCACCGCCTTGTTT	(SEQ ID NO. 4266)
6SD7_HP0532S526	CUACUACUACCTTTTCTTTCAATCACTTAC	(SEQ ID NO. 4267)
6SD8_HP0533S527	CUACUACUACACTCATCATTTTAAATCT	(SEQ ID NO. 4268)
6SD9_HP0534S528	CUACUACUAAATTTTACACTCCTTTTCTTT	(SEQ ID NO. 4269)
6SD10_HP0535S529	CUACUACUAAATACACTACTAGAGTCTTAC	(SEQ ID NO. 4270)
6SD11_HP0536S530	CUACUACUATCATAGAACCAATTTTGCCA	(SEQ ID NO. 4271)
6SD12_HP0537S531	CUACUACUATCCTATTTCAAGGATTTATC	(SEQ ID NO. 4272)
6SE1_HP0538S532	CUACUACUACGCTATTTTCCCATGAGCG	(SEQ ID NO. 4273)
6SE2_HP0539S533	CUACUACUAAAAATCATTTAACAATGATC	(SEQ ID NO. 4274)
6SE3_HP0540S534	CUACUACUAAAGTGTTCATTTGACAATAA	(SEQ ID NO. 4275)
6SE4_HP0541S535	CUACUACUATTCCTCACTTCACGATTATTT	(SEQ ID NO. 4276)
6SE5_HP0542S536	CUACUACUAGTTAATACCCCTAAGATCGGTG	(SEQ ID NO. 4277)
6SE6_HP0543S537	CUACUACUATTAACGCCACTCAATCGTTAC	(SEQ ID NO. 4278)
6SE7_HP0544S538	CUACUACUACATTTTAATACTCCTTTATTT	(SEQ ID NO. 4279)
6SE8_HP0545S539	CUACUACUACCCCTCTCTTTATAGATATAC	(SEQ ID NO. 4280)
6SE9_HP0546S540	CUACUACUATCAATTTAGCTAGCTCCTCCG	(SEQ ID NO. 4281)
6SE10_HP0547S541	CUACUACUAAATCCTTTAAGATTTTGGAAA	(SEQ ID NO. 4282)
6SE11_HP0549S542	CUACUACUACGTTACAATTTAAGCCATTCT	(SEQ ID NO. 4283)
6SE12_HP0550S543	CUACUACUATAGGATTTTATTTTTCATTC	(SEQ ID NO. 4284)
6SF1_HP0551S544	CUACUACUAAAGAGTTACTTCAAGTTGTAG	(SEQ ID NO. 4285)

6SF2_HP0552S545	CUACUACUACCTTTTATTGATTTTTTCTTC	(SEQ ID NO. 4286)
6SF3_HP0553S546	CUACUACUACCTAGTTGATTTTATCCATTA	(SEQ ID NO. 4287)
6SF4_HP0554S547	CUACUACUATTTTTCATCGCTGGAGTCTTT	(SEQ ID NO. 4288)
6SF5_HP0555S548	CUACUACUATTAAAGGCATCGCATCAAAAAC	(SEQ ID NO. 4289)
6SF6_HP0556S549	CUACUACUAAAAAAAGAGGGCCTTAATAA	(SEQ ID NO. 4290)
6SF7_HP0557S550	CUACUACUATCTAATTCAATGCTCTCCACAA	(SEQ ID NO. 4291)
6SF8_HP0558S551	CUACUACUACTAGGCTTTTTTGAATAATCAC	(SEQ ID NO. 4292)
6SF9_HP0559S552	CUACUACUATTAAAGCCAGTTTATTATCCTC	(SEQ ID NO. 4293)
6SF10_HP0560S553	CUACUACUATTCGTTGGAGCGTTTATTTTT	(SEQ ID NO. 4294)
6SF11_HP0561S554	CUACUACUATTGTTTAGGACTACATATAAA	(SEQ ID NO. 4295)
6SF12_HP0562S555	CUACUACUAGTCTATTATAGTCTTGACTCA	(SEQ ID NO. 4296)
6SG1_HP0563S556	CUACUACUATCACATTTTTTCTGGCAATTT	(SEQ ID NO. 4297)
6SG2_HP0564S557	CUACUACUATTAAAGCCTACTAGAAGAATC	(SEQ ID NO. 4298)
6SG3_HP0565S558	CUACUACUATCAGCTCTTAAGAGCAGCACC	(SEQ ID NO. 4299)
6SG4_HP0566S559	CUACUACUAAATGATCAAAAAACACCCATTT	(SEQ ID NO. 4300)
6SG5_HP0567S560	CUACUACUACCATAGGGCTTATATCATTCG	(SEQ ID NO. 4301)
6SG6_HP0568S561	CUACUACUATTATTTTTTTATAACGAATGAG	(SEQ ID NO. 4302)
6SG7_HP0569S562	CUACUACUAAATAAGACAGACTAGATATTGA	(SEQ ID NO. 4303)
6SG8_HP0570S563	CUACUACUACAGACAAGCCCATTTCAAGCC	(SEQ ID NO. 4304)
6SG9_HP0571S564	CUACUACUACTCTAGCGGTTTTTCTTACTA	(SEQ ID NO. 4305)
6SG10_HP0572S565	CUACUACUACCCCTTATTCTAGCACTCTAAC	(SEQ ID NO. 4306)
6SG11_HP0573S566	CUACUACUATTTAAAGGAGAGCTTCTATTT	(SEQ ID NO. 4307)
6SG12_HP0574S567	CUACUACUAAAGGTTTATGATTTTCAGCGATT	(SEQ ID NO. 4308)
6SH1_HP0575S568	CUACUACUAAAAGATTAAAGAGAGGAGTAAA	(SEQ ID NO. 4309)
6SH2_HP0576S569	CUACUACUATTAAATGCGTTGCGTTTCTTTT	(SEQ ID NO. 4310)
6SH3_HP0577S570	CUACUACUATTAAAAATCCCTTCCCTTGTG	(SEQ ID NO. 4311)
6SH4_HP0578S571	CUACUACUATAGTTTGTCAATCTTTAAGAT	(SEQ ID NO. 4312)
6SH5_HP0579S572	CUACUACUAAAGCGTTAATAACAACCTTTTT	(SEQ ID NO. 4313)
6SH6_HP0580S573	CUACUACUACGTTAAATCACTTGAGGAGGGA	(SEQ ID NO. 4314)
6SH7_HP0581S574	CUACUACUATTAGCGGATTTCTTGAAGGTT	(SEQ ID NO. 4315)
6SH8_HP0582S575	CUACUACUATTTTAATTGCCCTAAGTAA	(SEQ ID NO. 4316)
6SH9_HP0583S576	CUACUACUATTAGAATTTTCCCGCATATAA	(SEQ ID NO. 4317)

6SH10_HP0584S577	CUACUACUATCATGAATTTT	AGGAGATA	(SEQ ID NO. 4318)
6SH11_HP0585S578	CUACUACUACCACTACGCTTT	AAAGCTAGC	(SEQ ID NO. 4319)
6SH12_HP0586S579	CUACUACUAGCGTCATTTT	ACTTCTCTTTT	(SEQ ID NO. 4320)
6RA1_HP0489R484	CAUCAUCAUACAATGATCA	ATTACCCCTAAT	(SEQ ID NO. 4321)
6RA2_HP0490R485	CAUCAUCAUTTGTTTGAAA	AGTTGAAATTT	(SEQ ID NO. 4322)
6RA3_HP0491R486	CAUCAUCAUAGGATACACA	ATGGCAAAAAG	(SEQ ID NO. 4323)
6RA4_HP0492R487	CAUCAUCAUTTTATGGAG	CGGTTGCTTATT	(SEQ ID NO. 4324)
6RA5_HP0493R488	CAUCAUCAUTTTATGCTCT	CTATCTTTACTA	(SEQ ID NO. 4325)
6RA6_HP0494R489	CAUCAUCAUAGGTGCGTT	AAAAATGAAAAATC	(SEQ ID NO. 4326)
6RA7_HP0495R490	CAUCAUCAUATGCCATCT	GTGATTCAAAAAA	(SEQ ID NO. 4327)
6RA8_HP0496R491	CAUCAUCAUATGCGCTGT	AGGTATATTAC	(SEQ ID NO. 4328)
6RA9_HP0497R492	CAUCAUCAUGGTAGTTAA	GAAATGGGTAATC	(SEQ ID NO. 4329)
6RA10_HP0498R493	CAUCAUCAUGCATGGGAA	AAATTTTCTAAAT	(SEQ ID NO. 4330)
6RA11_HP0499R494	CAUCAUCAUATGAAAAG	CATTTTGCTCTTT	(SEQ ID NO. 4331)
6RA12_HP0500R495	CAUCAUCAUAACTATGA	AAATCAGTGTTAG	(SEQ ID NO. 4332)
6RB1_HP0501R496	CAUCAUCAUGCTGATTT	GAATGCAAAATTA	(SEQ ID NO. 4333)
6RB2_HP0502R497	CAUCAUCAUCGTGAATT	TAGGGTTTATTA	(SEQ ID NO. 4334)
6RB3_HP0503R498	CAUCAUCAUGTGGGAA	ATCCCCCTATAAC	(SEQ ID NO. 4335)
6RB4_HP0504R499	CAUCAUCAUTGTGAGTT	TGATTAAAGTTAG	(SEQ ID NO. 4336)
6RB5_HP0505R500	CAUCAUCAUTTGAGTGA	AATGATTGATTAC	(SEQ ID NO. 4337)
6RB6_HP0506R501	CAUCAUCAUCATGGTA	TTTTTTCATAAGAA	(SEQ ID NO. 4338)
6RB7_HP0507R502	CAUCAUCAUAGAGGGT	TTTTTAATGTCTTAT	(SEQ ID NO. 4339)
6RB8_HP0508R503	CAUCAUCAUATGTTA	AGGCTTTTGATAGGA	(SEQ ID NO. 4340)
6RB9_HP0509R504	CAUCAUCAUACATGTT	AGACCAACAACACA	(SEQ ID NO. 4341)
6RB10_HP0510R505	CAUCAUCAUCATGAAA	ATCGGTGTTTATGG	(SEQ ID NO. 4342)
6RB11_HP0511R506	CAUCAUCAUTATAAAA	ATGAAAACCATTAGA	(SEQ ID NO. 4343)
6RB12_HP0512R507	CAUCAUCAUTAATGAT	AGTAAGAACTCAAA	(SEQ ID NO. 4344)
6RC1_HP0513R508	CAUCAUCAUAAATGAT	AAGATGAACGGACAT	(SEQ ID NO. 4345)
6RC2_HP0514R509	CAUCAUCAUGGGATAT	GATGAAAGTTCTAT	(SEQ ID NO. 4346)
6RC3_HP0515R510	CAUCAUCAUAAAATGT	TGAAAGCGACGACGA	(SEQ ID NO. 4347)
6RC4_HP0516R511	CAUCAUCAUTTAATGT	CTCTAAATTGAATATG	(SEQ ID NO. 4348)
6RC5_HP0517R512	CAUCAUCAUAGTATAT	TTTTTATGATGAAAAC	(SEQ ID NO. 4349)

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6RC6_HP0518R513	CAUCAUCAUAAATAGGATTGAAAAAGGTAT	(SEQ ID NO. 4350)
6RC7_HP0519R514	CAUCAUCAUGATCTGACATGTTTAAAGATT	(SEQ ID NO. 4351)
6RC8_HP0520R515	CAUCAUCAUCTATGGCTGACACAATCAATA	(SEQ ID NO. 4352)
6RC9_HP0522R516	CAUCAUCAUTAAATGTTTAGAAAACTAGCAA	(SEQ ID NO. 4353)
6RC10_HP0523R517	CAUCAUCAUTTGTTCGAGAAATGGATTGGT	(SEQ ID NO. 4354)
6RC11_HP0524R518	CAUCAUCAUCAATGGAAGACTTTTGTATA	(SEQ ID NO. 4355)
6RC12_HP0525R519	CAUCAUCAUTAAGAAACATGACTGAAGACAG	(SEQ ID NO. 4356)
6RD1_HP0526R520	CAUCAUCAUAGGAAAACAGCAATGGAACTCG	(SEQ ID NO. 4357)
6RD2_HP0527R521	CAUCAUCAUCATGAATGAAGAAAACGATAA	(SEQ ID NO. 4358)
6RD3_HP0528R522	CAUCAUCAUTGATGGGGCAGGCATTTTTTA	(SEQ ID NO. 4359)
6RD4_HP0529R523	CAUCAUCAUAAACATGTTTAAATATTAAAGG	(SEQ ID NO. 4360)
6RD5_HP0530R524	CAUCAUCAUTCGCATGTTAGGGAAAAAAA	(SEQ ID NO. 4361)
6RD6_HP0531R525	CAUCAUCAUATGAACGATACAACAGAGCAT	(SEQ ID NO. 4362)
6RD7_HP0532R526	CAUCAUCAUATGAAACTGAGAGCAAGTGTT	(SEQ ID NO. 4363)
6RD8_HP0533R527	CAUCAUCAUGTAAATGCTTGATGTGAAA	(SEQ ID NO. 4364)
6RD9_HP0534R528	CAUCAUCAUCAAGAGCGATATGAGTAATAA	(SEQ ID NO. 4365)
6RD10_HP0535R529	CAUCAUCAUGTGAAATGCTTCTACTAAAA	(SEQ ID NO. 4366)
6RD11_HP0536R530	CAUCAUCAUACCAAAAATGAAACGACCGATT	(SEQ ID NO. 4367)
6RD12_HP0537R531	CAUCAUCAUAGGTTACAAAAAACTATAAGAT	(SEQ ID NO. 4368)
6RE1_HP0538R532	CAUCAUCAUAGGAGACACTCTTGAAAAAGTA	(SEQ ID NO. 4369)
6RE2_HP0539R533	CAUCAUCAUATGAAAAACACTCGTGAAAAAT	(SEQ ID NO. 4370)
6RE3_HP0540R534	CAUCAUCAUGAGGAAAGAGATGTGAAATGT	(SEQ ID NO. 4371)
6RE4_HP0541R535	CAUCAUCAUAAACATGGCAGGTACACAAGCT	(SEQ ID NO. 4372)
6RE5_HP0542R536	CAUCAUCAUTATGAAAAACGAATTTTATAA	(SEQ ID NO. 4373)
6RE6_HP0543R537	CAUCAUCAUAGGAGTATTAAATGAAACA	(SEQ ID NO. 4374)
6RE7_HP0544R538	CAUCAUCAUCTATAAAGAGAGGGGTGTTG	(SEQ ID NO. 4375)
6RE8_HP0545R539	CAUCAUCAUAGCTAAATTGATCAATAATAA	(SEQ ID NO. 4376)
6RE9_HP0546R540	CAUCAUCAUGAAACGCATGAAATTTTGTAC	(SEQ ID NO. 4377)
6RE10_HP0547R541	CAUCAUCAUGGAGAAACAATGACTAACGAA	(SEQ ID NO. 4378)
6RE11_HP0549R542	CAUCAUCAUATGAAAAATAGCGGTTTTGAT	(SEQ ID NO. 4379)
6RE12_HP0550R543	CAUCAUCAUAGGAAATTTAATGAACGAAA	(SEQ ID NO. 4380)
6RF1_HP0551R544	CAUCAUCAUGATGAAAAAAGGCATTACACC	(SEQ ID NO. 4381)

6RF2_HP0552R545	CAUCAUCAUTGGCTTTTGTGCTGTATTT	(SEQ ID NO. 4382)
6RF3_HP0553R546	CAUCAUCAUGCATGCAAGCAGTAATTTAT	(SEQ ID NO. 4383)
6RF4_HP0554R547	CAUCAUCAUTGAATGGAACAGAAATAAAA	(SEQ ID NO. 4384)
6RF5_HP0555R548	CAUCAUCAUTGAAAAACCTTTTGTAGCT	(SEQ ID NO. 4385)
6RF6_HP0556R549	CAUCAUCAUTGGTTACACATGAAAAAATC	(SEQ ID NO. 4386)
6RF7_HP0557R550	CAUCAUCAUTTTGAATGGCCGTTTATTAG	(SEQ ID NO. 4387)
6RF8_HP0558R551	CAUCAUCAUTTGGTGGTCGGATTGTAGT	(SEQ ID NO. 4388)
6RF9_HP0559R552	CAUCAUCAUTTATGGCTTTATTGGAAGATA	(SEQ ID NO. 4389)
6RF10_HP0560R553	CAUCAUCAUTGGGATTATTACTTAATA	(SEQ ID NO. 4390)
6RF11_HP0561R554	CAUCAUCAUAATGCAATTCACAGGGAATA	(SEQ ID NO. 4391)
6RF12_HP0562R555	CAUCAUCAUTGCCAGGATTAGGTTAGA	(SEQ ID NO. 4392)
6RG1_HP0563R556	CAUCAUGGGGTAAACAAGTGGCAATAAA	(SEQ ID NO. 4393)
6RG2_HP0564R557	CAUCAUGTGACTTTTATTCTCTCTAAA	(SEQ ID NO. 4394)
6RG3_HP0565R558	CAUCAUAUACCATGCAAGCGTTAAAAATC	(SEQ ID NO. 4395)
6RG4_HP0566R559	CAUCAUCAUTAGATGGTGTGTTTACAAAGTAT	(SEQ ID NO. 4396)
6RG5_HP0567R560	CAUCAUCAUTGAAAGCTCAGTATTTCTTT	(SEQ ID NO. 4397)
6RG6_HP0568R561	CAUCAUCAUCGTGATGCCCTTGGAAATTATT	(SEQ ID NO. 4398)
6RG7_HP0569R562	CAUCAUCAUAATGGGCTTGCTGTAGGCAT	(SEQ ID NO. 4399)
6RG8_HP0570R563	CAUCAUCAUGACTTTTATGTAAATAATCAAA	(SEQ ID NO. 4400)
6RG9_HP0571R564	CAUCAUCAUAGGGTGAATTTGGGAAGATA	(SEQ ID NO. 4401)
6RG10_HP0572R565	CAUCAUCAUATGAATGAAACGCTCAAAGAA	(SEQ ID NO. 4402)
6RG11_HP0573R566	CAUCAUCAUATGTTTACCCTAATGGTTTATT	(SEQ ID NO. 4403)
6RG12_HP0574R567	CAUCAUCAUGTTTATGAATAAGCTCTTAAA	(SEQ ID NO. 4404)
6RH1_HP0575R568	CAUCAUCAUGTGCAATTTTGTATTTCTCT	(SEQ ID NO. 4405)
6RH2_HP0576R569	CAUCAUCAUATGAAATTTTACGCTCTGTT	(SEQ ID NO. 4406)
6RH3_HP0577R570	CAUCAUCAUAAATGGGCATGCCAAATAGGG	(SEQ ID NO. 4407)
6RH4_HP0578R571	CAUCAUCAUTATGAAATCCCTATCTAATGC	(SEQ ID NO. 4408)
6RH5_HP0579R572	CAUCAUCAUATGCTTATATCTTCTCTTAC	(SEQ ID NO. 4409)
6RH6_HP0580R573	CAUCAUCAUTATCTTGGAAACCTTCAAGAAA	(SEQ ID NO. 4410)
6RH7_HP0581R574	CAUCAUCAUATGGAATCAGCTTTTGTGAC	(SEQ ID NO. 4411)
6RH8_HP0582R575	CAUCAUCAUTATGCCGGAATAATCTAAACT	(SEQ ID NO. 4412)
6RH9_HP0583R576	CAUCAUCAUTGAGATTGTTATTCTTGTTA	(SEQ ID NO. 4413)

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6RH10_HP0584R577	CAUCAUCAUAGTTTATGTGAGAAACAGAA	(SEQ ID NO. 4414)
6RH11_HP0585R578	CAUCAUCAUGAAGCGTGTGAAAAATGGGTT	(SEQ ID NO. 4415)
6RH12_HP0586R579	CAUCAUCAUTGATGAATAAAGAAACATG	(SEQ ID NO. 4416)
7SA1_HP0587S580	CUACUACUACTTAAATGATATATAGAAA	(SEQ ID NO. 4417)
7SA2_HP0588S581	CUACUACUAGCATTATTGTCTCTCCCTTC	(SEQ ID NO. 4418)
7SA3_HP0589S582	CUACUACUAGCCATTTTAAAGCTCCTTCAA	(SEQ ID NO. 4419)
7SA4_HP0590S583	CUACUACUACTTCCATTATTGTTTTCTCTTG	(SEQ ID NO. 4420)
7SA5_HP0591S584	CUACUACUAGCCATTAAAGCCCTAACTTCA	(SEQ ID NO. 4421)
7SA6_HP0592S585	CUACUACUATCTGTGCATGGCGTTTCCCTTA	(SEQ ID NO. 4422)
7SA7_HP0593S586	CUACUACUATCAATACACACGCTTAAACG	(SEQ ID NO. 4423)
7SA8_HP0594S587	CUACUACUACCCCTTATAGATTCATGTTAG	(SEQ ID NO. 4424)
7SA9_HP0595S588	CUACUACUAAAGTTTAAAAATTAAGGTGTA	(SEQ ID NO. 4425)
7SA10_HP0596S589	CUACUACUACCTACATGGCTATAGGGACTT	(SEQ ID NO. 4426)
7SA11_HP0597S590	CUACUACUATTAGAACAAACAGGTTCCCTC	(SEQ ID NO. 4427)
7SA12_HP0598S591	CUACUACUATTAAACCACTCTTAAAGAAGA	(SEQ ID NO. 4428)
7SB1_HP0599S592	CUACUACUAAATCATTCGCCCTTTTGAATTT	(SEQ ID NO. 4429)
7SB2_HP0600S593	CUACUACUATTAGTATTGCTGCTTCAAAAA	(SEQ ID NO. 4430)
7SB3_HP0601S594	CUACUACUAACTAAGTTAAAGCCTTAAGA	(SEQ ID NO. 4431)
7SB4_HP0602S595	CUACUACUAAAAATCAAGTTTAAATCCAA	(SEQ ID NO. 4432)
7SB5_HP0603S596	CUACUACUATTACCCCTAAATCTCGTAAA	(SEQ ID NO. 4433)
7SB6_HP0604S597	CUACUACUACCTATCGTCTGGTTTTCAGCAT	(SEQ ID NO. 4434)
7SB7_HP0605S598	CUACUACUATTAATGCACATAGTCGTCTAT	(SEQ ID NO. 4435)
7SB8_HP0606S599	CUACUACUAAACATCAAAATATCCTATTATT	(SEQ ID NO. 4436)
7SB9_HP0607S600	CUACUACUATTTTTCATTCTAAAGTTTTTTG	(SEQ ID NO. 4437)
7SB10_HP0608S601	CUACUACUATCTCTTAAACATATAGCTAT	(SEQ ID NO. 4438)
7SB11_HP0609S602	CUACUACUATGTTGTTATCCGCTCTTAATA	(SEQ ID NO. 4439)
7SB12_HP0610S603	CUACUACUATGGCTCAAAAGGGTAAGC	(SEQ ID NO. 4440)
7SC1_HP0611S604	CUACUACUACTTTAACGCATGCGTTCTTTG	(SEQ ID NO. 4441)
7SC2_HP0612S605	CUACUACUAAAGAAATATATATGCGATT	(SEQ ID NO. 4442)
7SC3_HP0613S606	CUACUACUACCCACTAAATATCCTTTAGTA	(SEQ ID NO. 4443)
7SC4_HP0614S607	CUACUACUAGTTATTGGTTTATGCGGTGTT	(SEQ ID NO. 4444)
7SC5_HP0615S608	CUACUACUATAAATTTTAATCCAATCTTTA	(SEQ ID NO. 4445)

7SC6_HP0616S609	CUACUACUAATTTATGAAAGCGTTTTTTTA	(SEQ ID NO. 4446)
7SC7_HP0617S610	CUACUACUAATTTATTTCTCAAGCGAATGTG	(SEQ ID NO. 4447)
7SC8_HP0618S611	CUACUACUAATTAATTACCGAAAGACAAGAT	(SEQ ID NO. 4448)
7SC9_HP0620S612	CUACUACUAATTAGCCTTGATAGGCTTTTAT	(SEQ ID NO. 4449)
7SC10_HP0621S613	CUACUACUAAACTACAAATTTAACGATTTTA	(SEQ ID NO. 4450)
7SC11_HP0622S614	CUACUACUATCATTAGGTTGGATTAAAGGG	(SEQ ID NO. 4451)
7SC12_HP0623S615	CUACUACUATTACATTTTCGCCCTCTTAATTG	(SEQ ID NO. 4452)
7SD1_HP0624S616	CUACUACUATCAAGCATGATTTTCTCGATA	(SEQ ID NO. 4453)
7SD2_HP0625S617	CUACUACUACTAATCCTTTTAAACTTTTTTC	(SEQ ID NO. 4454)
7SD3_HP0626S618	CUACUACUATTAATGCAGGTTTGTGATTCAA	(SEQ ID NO. 4455)
7SD4_HP0627S619	CUACUACUATACCCCATTAGCATACATCGC	(SEQ ID NO. 4456)
7SD5_HP0628S620	CUACUACUAAATTAGGGTATATCATAAGAA	(SEQ ID NO. 4457)
7SD6_HP0629S621	CUACUACUACTTGTATTATTCACAATAAAG	(SEQ ID NO. 4458)
7SD7_HP0630S622	CUACUACUAGAAATGGGGGGTTAAAAAAA	(SEQ ID NO. 4459)
7SD8_HP0631S623	CUACUACUAAATCCCTTACTCTTTGTTTTT	(SEQ ID NO. 4460)
7SD9_HP0632S624	CUACUACUACTTTTTAGAATTTAGCGAAAT	(SEQ ID NO. 4461)
7SD10_HP0633S625	CUACUACUAACTCATTTCTTTGGTATAACCA	(SEQ ID NO. 4462)
7SD11_HP0634S626	CUACUACUATTCAAAAACCCCTTATAAGAAA	(SEQ ID NO. 4463)
7SD12_HP0635S627	CUACUACUAAAGCCCTTATTCATAATCCAAA	(SEQ ID NO. 4464)
7SE1_HP0636S628	CUACUACUATCACCCCTTCGGCGATATGTT	(SEQ ID NO. 4465)
7SE2_HP0637S629	CUACUACUAAATCAATAAAAAGCGTAAGGGA	(SEQ ID NO. 4466)
7SE3_HP0638S630	CUACUACUAGTTTTTAATGTTTGTGTTTTTAA	(SEQ ID NO. 4467)
7SE4_HP0639S631	CUACUACUATTTATTTTTTATTAGCTTGAAA	(SEQ ID NO. 4468)
7SE5_HP0640S632	CUACUACUATTTTAAATTTCTTCTGCCTAT	(SEQ ID NO. 4469)
7SE6_HP0641S633	CUACUACUATTAATGTTCTCCTTTTCTCTAA	(SEQ ID NO. 4470)
7SE7_HP0642S634	CUACUACUATTTATTCATCACTTCATAAAT	(SEQ ID NO. 4471)
7SE8_HP0643S635	CUACUACUATCATGCTTTGAGCCTTAAAC	(SEQ ID NO. 4472)
7SE9_HP0644S636	CUACUACUACGCATGATTTTCTTTAAAGGT	(SEQ ID NO. 4473)
7SE10_HP0645S637	CUACUACUATCATGTTTGTCTCTTTGAGTT	(SEQ ID NO. 4474)
7SE11_HP0646S638	CUACUACUAAAGATTATAGCGTTTTTTTAT	(SEQ ID NO. 4475)
7SE12_HP0647S639	CUACUACUATCTATCCTTTTCTTTTTTTAT	(SEQ ID NO. 4476)
7SF1_HP0648S640	CUACUACUACAAATCTTGGATTATTTTTCT	(SEQ ID NO. 4477)

7SF2_HP0649S641	CUACUACUACGTTGAGTCTTTATGCTTTT	(SEQ ID NO. 4478)
7SF3_HP0650S642	CUACUACUATTAAGATTGGTTAAGAAATG	(SEQ ID NO. 4479)
7SF4_HP0651S643	CUACUACUACCTTACTTTTAAACCCATCTC	(SEQ ID NO. 4480)
7SF5_HP0652S644	CUACUACUATTTTAAATCAAAGGCTTGAT	(SEQ ID NO. 4481)
7SF6_HP0653S645	CUACUACUAAACCCAATACCCTAAATTAAG	(SEQ ID NO. 4482)
7SF7_HP0654S646	CUACUACUAGCTAAATAATTATAAATTC	(SEQ ID NO. 4483)
7SF8_HP0655S647	CUACUACUAGCATTTTAAACCTTGTTCC	(SEQ ID NO. 4484)
7SF9_HP0656S648	CUACUACUATTTTTCATGTTATTATACC	(SEQ ID NO. 4485)
7SF10_HP0657S649	CUACUACUAGCATCATTTGTCTCTCTTTT	(SEQ ID NO. 4486)
7SF11_HP0658S650	CUACUACUATCATCAACCAATTTCTCTTT	(SEQ ID NO. 4487)
7SF12_HP0659S651	CUACUACUATCACTCTCTAAATCATCAAT	(SEQ ID NO. 4488)
7SG1_HP0660S652	CUACUACUATTCATTTCTTGCATTCATC	(SEQ ID NO. 4489)
7SG2_HP0661S653	CUACUACUATTCCTTTAAGTGGTCGTTT	(SEQ ID NO. 4490)
7SG3_HP0662S654	CUACUACUATCATTTGGCTTCCTTCAGTTT	(SEQ ID NO. 4491)
7SG4_HP0663S655	CUACUACUACCAATTTCTGTTTAATCTCAT	(SEQ ID NO. 4492)
7SG5_HP0664S656	CUACUACUAAATCAATGTTTGCAATTAATA	(SEQ ID NO. 4493)
7SG6_HP0665S657	CUACUACUATTTCAATTCATAGCGTTTACT	(SEQ ID NO. 4494)
7SG7_HP0666S658	CUACUACUAGGTTAAAGGCTTTTATTC	(SEQ ID NO. 4495)
7SG8_HP0667S659	CUACUACUAGATGCTATTTTGATGGAATTT	(SEQ ID NO. 4496)
7SG9_HP0668S660	CUACUACUATTCATCGTTGTGATTGGTTGC	(SEQ ID NO. 4497)
7SG10_HP0669S661	CUACUACUATAATCACTCAAACTCTTTTC	(SEQ ID NO. 4498)
7SG11_HP0670S662	CUACUACUAAAGGGTTTACCGGTTTGGC	(SEQ ID NO. 4499)
7SG12_HP0671S663	CUACUACUAAATCAGAAATGTAAACGATA	(SEQ ID NO. 4500)
7SH1_HP0672S664	CUACUACUATCTTTTATCCCTTTGATTG	(SEQ ID NO. 4501)
7SH2_HP0673S665	CUACUACUACATCAGGAGTAATAAACAAAT	(SEQ ID NO. 4502)
7SH3_HP0674S666	CUACUACUATTAGTCATCTATTAAAGTGAAT	(SEQ ID NO. 4503)
7SH4_HP0675S667	CUACUACUAGGGTGTTTTAAATTTCTCTCC	(SEQ ID NO. 4504)
7SH5_HP0676S668	CUACUACUACCCCATTTTAAAGAAATTA	(SEQ ID NO. 4505)
7SH6_HP0677S669	CUACUACUATCAATTAATAAAGAGTTGT	(SEQ ID NO. 4506)
7SH7_HP0678S670	CUACUACUATGATGCCCTTTATGGTCTGTT	(SEQ ID NO. 4507)
7SH8_HP0679S671	CUACUACUATTAAGCCAATTTGACAGACGC	(SEQ ID NO. 4508)
7SH9_HP0680S672	CUACUACUACTTATATATTGGCAATTAATA	(SEQ ID NO. 4509)

7SH10_HP0681S673	CUACUACUAAAAATCACCACCCCATTTAGC	(SEQ ID NO. 4510)
7SH11_HP0682S674	CUACUACUATGACTCATTTAAGATCACCAA	(SEQ ID NO. 4511)
7SH12_HP0683S675	CUACUACUATTAAGGTTTCTTAAAAAATTT	(SEQ ID NO. 4512)
7RA1_HP0587R580	CAUCAUCAUATGACGACTAAAAAGAGTGAAT	(SEQ ID NO. 4513)
7RA2_HP0588R581	CAUCAUCAUGGAGAAATGAATGGCTAAAAATG	(SEQ ID NO. 4514)
7RA3_HP0589R582	CAUCAUCAUATGCGTGAGATTATTTCTGAT	(SEQ ID NO. 4515)
7RA4_HP0590R583	CAUCAUCAUAAATGCGTTTAATTATGATG	(SEQ ID NO. 4516)
7RA5_HP0591R584	CAUCAUCAUTAAATGGAAGCGCAATTACGAT	(SEQ ID NO. 4517)
7RA6_HP0592R585	CAUCAUCAUTTGCGTTGCGTTTTTACCAAT	(SEQ ID NO. 4518)
7RA7_HP0593R586	CAUCAUCAUTGACATGCTTTTAAAGAATTT	(SEQ ID NO. 4519)
7RA8_HP0594R587	CAUCAUCAUCATGGAGTTTGTGGGACTGAT	(SEQ ID NO. 4520)
7RA9_HP0595R588	CAUCAUCAUGGGATGCATGGATAAAGAAAC	(SEQ ID NO. 4521)
7RA10_HP0596R589	CAUCAUCAUGCGTGTAGAAAAATCTTTT	(SEQ ID NO. 4522)
7RA11_HP0597R590	CAUCAUCAUATGCTAAAAAAGATTTTAT	(SEQ ID NO. 4523)
7RA12_HP0598R591	CAUCAUCAUAAAGTGTTTTGATGTTTCTAA	(SEQ ID NO. 4524)
7RB1_HP0599R592	CAUCAUCAUTGCCATAATGTTTGGGAATAA	(SEQ ID NO. 4525)
7RB2_HP0600R593	CAUCAUCAUCATGCAAAACACCAATGGATAC	(SEQ ID NO. 4526)
7RB3_HP0601R594	CAUCAUCAUCAATGGCTTTTCAGGTCAATA	(SEQ ID NO. 4527)
7RB4_HP0602R595	CAUCAUCAUTGTGTTGGATAGTTTGTGAGAT	(SEQ ID NO. 4528)
7RB5_HP0603R596	CAUCAUCAUTTTTATTGGCCAAAAGGATTG	(SEQ ID NO. 4529)
7RB6_HP0604R597	CAUCAUCAUAGGATTTATGATGATTTTCAT	(SEQ ID NO. 4530)
7RB7_HP0605R598	CAUCAUCAUGGGATTGATGAATACTATCAT	(SEQ ID NO. 4531)
7RB8_HP0606R599	CAUCAUCAUGAAAAATGATACGAAAAATTTT	(SEQ ID NO. 4532)
7RB9_HP0607R600	CAUCAUCAUAGGATATTTTGATGTATAAAA	(SEQ ID NO. 4533)
7RB10_HP0608R601	CAUCAUCAUATGGTGGTTTAGCTCCTATT	(SEQ ID NO. 4534)
7RB11_HP0609R602	CAUCAUCAUGGTTCAAAATATGACTTATAG	(SEQ ID NO. 4535)
7RB12_HP0610R603	CAUCAUCAUACACCTTTTGTGCAATTCA	(SEQ ID NO. 4536)
7RC1_HP0611R604	CAUCAUCAUACATGCTATCACCAGCAACTT	(SEQ ID NO. 4537)
7RC2_HP0612R605	CAUCAUCAUGTGGAGCAATTCTATCTATC	(SEQ ID NO. 4538)
7RC3_HP0613R606	CAUCAUCAUTTATGATTTCTAACATCAGCA	(SEQ ID NO. 4539)
7RC4_HP0614R607	CAUCAUCAUTTTAAGGAGCAATGATGGAAC	(SEQ ID NO. 4540)
7RC5_HP0615R608	CAUCAUCAUACATGATAAAAGCCAAAAAG	(SEQ ID NO. 4541)

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7RC6_HP0616R609	CAUCAUCAUGGTGGTAAGAGATATTGACAA	(SEQ ID NO. 4542)
7RC7_HP0617R610	CAUCAUCAUAAAACATGCGAAGTCATTTTT	(SEQ ID NO. 4543)
7RC8_HP0618R611	CAUCAUCAUGGATACGATATGAACAACATA	(SEQ ID NO. 4544)
7RC9_HP0620R612	CAUCAUCAUGCAATGAATTTAGAGAAGTTA	(SEQ ID NO. 4545)
7RC10_HP0621R613	CAUCAUCAUCTTGTGGATTGGGATTCTTGT	(SEQ ID NO. 4546)
7RC11_HP0622R614	CAUCAUCAUATGGGTGCAGTGGTTGTTTAA	(SEQ ID NO. 4547)
7RC12_HP0623R615	CAUCAUCAUATCATGTCTTGAAACCCCAAAA	(SEQ ID NO. 4548)
7RD1_HP0624R616	CAUCAUCAUATGACCTTTGAGCCTTATCCT	(SEQ ID NO. 4549)
7RD2_HP0625R617	CAUCAUCAUGGTTTAATGTCTAGAAAAATAGA	(SEQ ID NO. 4550)
7RD3_HP0626R618	CAUCAUCAUATGATCAATAAGTTTAAAAAT	(SEQ ID NO. 4551)
7RD4_HP0627R619	CAUCAUCAUGAATGCTCAAAAAAGTTTGT	(SEQ ID NO. 4552)
7RD5_HP0628R620	CAUCAUCAUTCCTATTATGAATGGGTGTC	(SEQ ID NO. 4553)
7RD6_HP0629R621	CAUCAUCAUGCTATGGAAGCGAAACAAGC	(SEQ ID NO. 4554)
7RD7_HP0630R622	CAUCAUCAUATGAAAAAAGTACTCATCATT	(SEQ ID NO. 4555)
7RD8_HP0631R623	CAUCAUCAUGAGTGGTCATGTTCTACGATG	(SEQ ID NO. 4556)
7RD9_HP0632R624	CAUCAUCAUCATGTCAAAAAAATCGTAGT	(SEQ ID NO. 4557)
7RD10_HP0633R625	CAUCAUCAUATGGATAAAATGAATAAGGTC	(SEQ ID NO. 4558)
7RD11_HP0634R626	CAUCAUCAUATGAGTCAAAAAATCCTAATT	(SEQ ID NO. 4559)
7RD12_HP0635R627	CAUCAUCAUTTGAATTGGTTTGTGTTTTTC	(SEQ ID NO. 4560)
7RE1_HP0636R628	CAUCAUCAUTATGCGTATAGTTAGAAAAATT	(SEQ ID NO. 4561)
7RE2_HP0637R629	CAUCAUCAUCCATGCATCAAAAACAATAAAA	(SEQ ID NO. 4562)
7RE3_HP0638R630	CAUCAUCAUATGAAAAAAGCTCTCTTACTA	(SEQ ID NO. 4563)
7RE4_HP0639R631	CAUCAUCAUAAATTTGATGGAAACAATAAAT	(SEQ ID NO. 4564)
7RE5_HP0640R632	CAUCAUCAUGTGTGTTGAGTTAGAGAAGGA	(SEQ ID NO. 4565)
7RE6_HP0641R633	CAUCAUCAUAGAAAAACATGATAACGATGAA	(SEQ ID NO. 4566)
7RE7_HP0642R634	CAUCAUCAUATTAATAATGGACAGAGAACAA	(SEQ ID NO. 4567)
7RE8_HP0643R635	CAUCAUCAUAGGGTTTTTATGCTTCGTTTT	(SEQ ID NO. 4568)
7RE9_HP0644R636	CAUCAUCAUGCATGATTTTTTCCACTCTTA	(SEQ ID NO. 4569)
7RE10_HP0645R637	CAUCAUCAUATCATGCGTTTTTTTACCTTG	(SEQ ID NO. 4570)
7RE11_HP0646R638	CAUCAUCAUGGACAAACCATGATTAAAAAA	(SEQ ID NO. 4571)
7RE12_HP0647R639	CAUCAUCAUCATGGGCAATTTGACTTATTA	(SEQ ID NO. 4572)
7RF1_HP0648R640	CAUCAUCAUTTGGATTTTTTTAGAGATTGTA	(SEQ ID NO. 4573)

7RF2_HP0649R641	CAUCAUAUATGCGTATTGAGCATGATTC	(SEQ ID NO. 4574)
7RF3_HP0650R642	CAUCAUAUTTTATATGAGCGTCTTTTGG	(SEQ ID NO. 4575)
7RF4_HP0651R643	CAUCAUAUAAAGGATAACCATGTTCCAAC	(SEQ ID NO. 4576)
7RF5_HP0652R644	CAUCAUAUAGGGTATTGGGTGCAAAAAC	(SEQ ID NO. 4577)
7RF6_HP0653R645	CAUCAUAUATGTTATCAAAAGACATCAT	(SEQ ID NO. 4578)
7RF7_HP0654R646	CAUCAUCAUATGGACTTTTATAGAAAAGT	(SEQ ID NO. 4579)
7RF8_HP0655R647	CAUCAUAUATTAATAAATAATCTATCC	(SEQ ID NO. 4580)
7RF9_HP0656R648	CAUCAUAUGGCAATGGCAAGAAATGTAAA	(SEQ ID NO. 4581)
7RF10_HP0657R649	CAUCAUCAUAAAGGTATAAATAACATGAA	(SEQ ID NO. 4582)
7RF11_HP0658R650	CAUCAUAUATGATGCCATTTGAAGCTGTA	(SEQ ID NO. 4583)
7RF12_HP0659R651	CAUCAUAUATGAGGAAAATTTTCTTAT	(SEQ ID NO. 4584)
7RG1_HP0660R652	CAUCAUAUTAGATTGTGCAACACTTCAAT	(SEQ ID NO. 4585)
7RG2_HP0661R653	CAUCAUGAATGCAAGAAAATTGAAAATTT	(SEQ ID NO. 4586)
7RG3_HP0662R654	CAUCAUAUAGGAAAATGATGAAAAACA	(SEQ ID NO. 4587)
7RG4_HP0663R655	CAUCAUAUAGGAAGCCAAATGAACACTT	(SEQ ID NO. 4588)
7RG5_HP0664R656	CAUCAUAUAGTGGAATAATACCTAAAA	(SEQ ID NO. 4589)
7RG6_HP0665R657	CAUCAUAUATGCAAAACCATGATTTTGAA	(SEQ ID NO. 4590)
7RG7_HP0666R658	CAUCAUAUAGTAAACGCTATGAATGAAA	(SEQ ID NO. 4591)
7RG8_HP0667R659	CAUCAUAUATGAAAAATGCAAGAAATCAG	(SEQ ID NO. 4592)
7RG9_HP0668R660	CAUCAUAUGTGCAATGCAAAATCCATCAA	(SEQ ID NO. 4593)
7RG10_HP0669R661	CAUCAUCAUATGACCCCAAGCCTGGTTGAT	(SEQ ID NO. 4594)
7RG11_HP0670R662	CAUCAUAUAAAGAGGTTTGAGTGATTACAT	(SEQ ID NO. 4595)
7RG12_HP0671R663	CAUCAUAUTGTTGTATGAAAAAGTTTGT	(SEQ ID NO. 4596)
7RH1_HP0672R664	CAUCAUAUTTAAGCATGTTGTATTCCTCT	(SEQ ID NO. 4597)
7RH2_HP0673R665	CAUCAUAUAAATAATATGGCAGTAAGATTG	(SEQ ID NO. 4598)
7RH3_HP0674R666	CAUCAUAUGATCTAAATGCTAGCTTATTG	(SEQ ID NO. 4599)
7RH4_HP0675R667	CAUCAUAUAAATGAAACACCCCTAGAAAGA	(SEQ ID NO. 4600)
7RH5_HP0676R668	CAUCAUAUATGGTTTATATACCCTACTAT	(SEQ ID NO. 4601)
7RH6_HP0677R669	CAUCAUAUATGGATATTTATGCGTTATAT	(SEQ ID NO. 4602)
7RH7_HP0678R670	CAUCAUAUGGGGGTTTGGTTTGGATGACG	(SEQ ID NO. 4603)
7RH8_HP0679R671	CAUCAUAUATGCTTTTGGCGATGATTGGT	(SEQ ID NO. 4604)
7RH9_HP0680R672	CAUCAUAUTTGATTACAGTGGTTAAACGA	(SEQ ID NO. 4605)

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7RH10_HP0681R673	CAUCAUTATGATAGTACTACGAAAGAGAA	(SEQ ID NO. 4606)
7RH11_HP0682R674	CAUCAUGTGTGCGCAACATGCCTTGAA	(SEQ ID NO. 4607)
7RH12_HP0683R675	CAUCAUTTAATGCTTTCTGTGTCATCATA	(SEQ ID NO. 4608)
8SA1_HP0685S676	CUACUACUACGCTTGAATGCTTGTGTTAATAT	(SEQ ID NO. 4609)
8SA2_HP0686S677	CUACUACUAGTTTAAACTCATATAATTCAAA	(SEQ ID NO. 4610)
8SA3_HP0687S678	CUACUACUATTTAAACCAAAATTTGAGTCG	(SEQ ID NO. 4611)
8SA4_HP0688S679	CUACUACUACATTTAGATTCAACCCCTAAC	(SEQ ID NO. 4612)
8SA5_HP0689S680	CUACUACUATTTAAGCAAACTCCCTAATCT	(SEQ ID NO. 4613)
8SA6_HP0690S681	CUACUACUATTTCTCTTATTTTGTGTTCAAC	(SEQ ID NO. 4614)
8SA7_HP0691S682	CUACUACUACTCTCTCATTTCTGTCCTCTT	(SEQ ID NO. 4615)
8SA8_HP0692S683	CUACUACUACTATAAGCGCACCTCAAAATTC	(SEQ ID NO. 4616)
8SA9_HP0693S684	CUACUACUAAAAAACTCACACTAAAAAATA	(SEQ ID NO. 4617)
8SA10_HP0694S685	CUACUACUAGCCCTTACAAAAATAATAG	(SEQ ID NO. 4618)
8SA11_HP0695S686	CUACUACUACTCCTTTATTTAATTTCTTTC	(SEQ ID NO. 4619)
8SA12_HP0696S687	CUACUACUATTTATTTCTCATCAACCAACA	(SEQ ID NO. 4620)
8SB1_HP0697S688	CUACUACUACAACTTAGCGTCTTTCTGGG	(SEQ ID NO. 4621)
8SB2_HP0698S689	CUACUACUAAAGTATAGTATAGAACTCAT	(SEQ ID NO. 4622)
8SB3_HP0699S690	CUACUACUAACTCACTCATGGCTTATTTGT	(SEQ ID NO. 4623)
8SB4_HP0700S691	CUACUACUAGTGTCTCCCTAAATTTAATT	(SEQ ID NO. 4624)
8SB5_HP0701S692	CUACUACUAGCATCACTCAAAACAATTTG	(SEQ ID NO. 4625)
8SB6_HP0702S693	CUACUACUACGATTTTTCATTTCTTCTTCTT	(SEQ ID NO. 4626)
8SB7_HP0703S694	CUACUACUATCCCTACCTTTCCAAAAACAA	(SEQ ID NO. 4627)
8SB8_HP0704S695	CUACUACUAGCTAGCGGCAACAATAACCAT	(SEQ ID NO. 4628)
8SB9_HP0705S696	CUACUACUACTATTTCAATTTCCAAAGCTAA	(SEQ ID NO. 4629)
8SB10_HP0706S697	CUACUACUATTTAAAGTGTAGTTATACCC	(SEQ ID NO. 4630)
8SB11_HP0707S698	CUACUACUATACTCATGCTTGAATTGAAA	(SEQ ID NO. 4631)
8SB12_HP0708S699	CUACUACUATTTCACTTAAACGCAATATCG	(SEQ ID NO. 4632)
8SC1_HP0709S700	CUACUACUATTTACTTAGCGCACTTCTTTA	(SEQ ID NO. 4633)
8SC2_HP0710S701	CUACUACUACTCAAAACACCCACCCATAAT	(SEQ ID NO. 4634)
8SC3_HP0711S702	CUACUACUACATTTATTTAAATCCCTTAAC	(SEQ ID NO. 4635)
8SC4_HP0712S703	CUACUACUATTTATAGCCATAGGCACTTGAA	(SEQ ID NO. 4636)
8SC5_HP0714S704	CUACUACUATTTCAAGCGGCATCAAAATAG	(SEQ ID NO. 4637)

8SC6_HP0715S705	CUACUACUAAAGATCGCCATGTCTATACCT	(SEQ ID NO. 4638)
8SC7_HP0716S706	CUACUACUACCCCTTTAAGCGATCTTTATTG	(SEQ ID NO. 4639)
8SC8_HP0717S707	CUACUACUACGCTCTCATACAATTCCACG	(SEQ ID NO. 4640)
8SC9_HP0718S708	CUACUACUACCTTTTGTAGGTTTGTCTCAATA	(SEQ ID NO. 4641)
8SC10_HP0719S709	CUACUACUACACTTCTTCACGCATTTTTTTT	(SEQ ID NO. 4642)
8SC11_HP0720S710	CUACUACUATAAATTAAATTATCTCTCACTT	(SEQ ID NO. 4643)
8SC12_HP0721S711	CUACUACUATTTAGTGCTTATCGCTGTGAT	(SEQ ID NO. 4644)
8SD1_HP0723S712	CUACUACUACTTTCAATACTCTTCAAAACAT	(SEQ ID NO. 4645)
8SD2_HP0724S713	CUACUACUAGGTGATAAAATCTACAAAACCT	(SEQ ID NO. 4646)
8SD3_HP0726S714	CUACUACUATAATGAGAACGAATCCAAACT	(SEQ ID NO. 4647)
8SD4_HP0727S715	CUACUACUATTCAAACGCTTTTGTGATTC	(SEQ ID NO. 4648)
8SD5_HP0728S716	CUACUACUATTTATAGATCCATTAAACTC	(SEQ ID NO. 4649)
8SD6_HP0729S717	CUACUACUATTTATGAAGTTTCCCTTGTGGGT	(SEQ ID NO. 4650)
8SD7_HP0730S718	CUACUACUATCATGCCTTGCCCTTACTTTAA	(SEQ ID NO. 4651)
8SD8_HP0731S719	CUACUACUATTCAGTTCATGCCCTCTTTTCAG	(SEQ ID NO. 4652)
8SD9_HP0732S720	CUACUACUATGTTCTAGCGTTTTCATTTCTC	(SEQ ID NO. 4653)
8SD10_HP0733S721	CUACUACUATCCAACTAATCCTGCAATAAT	(SEQ ID NO. 4654)
8SD11_HP0734S722	CUACUACUATTTTAAAGGGCTTAAACC	(SEQ ID NO. 4655)
8SD12_HP0735S723	CUACUACUAGTTAATGGCTTTTAAAGTTT	(SEQ ID NO. 4656)
8SE1_HP0736S724	CUACUACUACCTTAAATTCATAATATGTC	(SEQ ID NO. 4657)
8SE2_HP0737S725	CUACUACUACTTAAATTAAGTTTAAATGT	(SEQ ID NO. 4658)
8SE3_HP0738S726	CUACUACUACATTACTTATCTTTTGGATT	(SEQ ID NO. 4659)
8SE4_HP0739S727	CUACUACUACTAAGACTTTGTCATGATGATA	(SEQ ID NO. 4660)
8SE5_HP0740S728	CUACUACUACTAAATGTAATTAGGGCGTC	(SEQ ID NO. 4661)
8SE6_HP0741S729	CUACUACUATTCACCAAGCTCCTTTTCTA	(SEQ ID NO. 4662)
8SE7_HP0742S730	CUACUACUATTTTATTTCCCTTTTAAAGTG	(SEQ ID NO. 4663)
8SE8_HP0743S731	CUACUACUACGGTTATGAGCCGAGTGCTCT	(SEQ ID NO. 4664)
8SE9_HP0745S732	CUACUACUAAACCGCTAATACCCACTACT	(SEQ ID NO. 4665)
8SE10_HP0746S733	CUACUACUATTTAGCGCTCTAAACAAAC	(SEQ ID NO. 4666)
8SE11_HP0747S734	CUACUACUAAACACTCATCCAATTCCTTTT	(SEQ ID NO. 4667)
8SE12_HP0748S735	CUACUACUATTAAGAGTATTCATAAACTTC	(SEQ ID NO. 4668)
8SF1_HP0749S736	CUACUACUATTATACATGCCTAGTCCCTCCA	(SEQ ID NO. 4669)

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8SF2_HP0750S737	CUACUACUATTAAATGCGTGGATGAGTTT	(SEQ ID NO. 4670)
8SF3_HP0751S738	CUACUACUATTTAGCCTCTTTTATCAAAGA	(SEQ ID NO. 4671)
8SF4_HP0752S739	CUACUACUATCATTTGCACGGAATTGAATT	(SEQ ID NO. 4672)
8SF5_HP0753S740	CUACUACUAAAAATGTTAGCGAGTTCATC	(SEQ ID NO. 4673)
8SF6_HP0754S741	CUACUACUATTAAAGACAAAAATTTTGAAT	(SEQ ID NO. 4674)
8SF7_HP0755S742	CUACUACUATCACCTTCCTTTTATCGTTGAT	(SEQ ID NO. 4675)
8SF8_HP0756S743	CUACUACUAAATTTTTCACCTCTCTTCATATA	(SEQ ID NO. 4676)
8SF9_HP0757S744	CUACUACUAAATCAAATATAGCGTTTAAACA	(SEQ ID NO. 4677)
8SF10_HP0758S745	CUACUACUATTTGATAGATTAGCCTAATAGT	(SEQ ID NO. 4678)
8SF11_HP0759S746	CUACUACUACAATAATCAAGCCTTTTTCCTC	(SEQ ID NO. 4679)
8SF12_HP0760S747	CUACUACUAGGGAATAAGGCTTGATTATTG	(SEQ ID NO. 4680)
8SG1_HP0761S748	CUACUACUAGCCCTCTAGCGTAATAGATCT	(SEQ ID NO. 4681)
8SG2_HP0762S749	CUACUACUATTAAATCCTTTAAATTTGGAAT	(SEQ ID NO. 4682)
8SG3_HP0763S750	CUACUACUATTAGAAATTTATTGTCCACAA	(SEQ ID NO. 4683)
8SG4_HP0764S751	CUACUACUATTCTAAATTTATTCTTAAGAA	(SEQ ID NO. 4684)
8SG5_HP0765S752	CUACUACUATCCTTTTAGATGTTTATGATAT	(SEQ ID NO. 4685)
8SG6_HP0766S753	CUACUACUACCTTTAAATTTCTATTTTCCA	(SEQ ID NO. 4686)
8SG7_HP0767S754	CUACUACUAGGTTTAGGGTAGGCTTATAAA	(SEQ ID NO. 4687)
8SG8_HP0768S755	CUACUACUACCTACCCCTGTGTAGTAAA	(SEQ ID NO. 4688)
8SG9_HP0769S756	CUACUACUACCTTCAGCCATTGGCCCTCTTT	(SEQ ID NO. 4689)
8SG10_HP0770S757	CUACUACUAAAAATCTTAAAGAGGTTTAAAT	(SEQ ID NO. 4690)
8SG11_HP0771S758	CUACUACUATATTTGAGCTTTAAATTTGAT	(SEQ ID NO. 4691)
8SG12_HP0772S759	CUACUACUACTAATCATCTTTGCTGAAGAA	(SEQ ID NO. 4692)
8SH1_HP0773S760	CUACUACUACTACAAAAATTAACCTCTGTAA	(SEQ ID NO. 4693)
8SH2_HP0774S761	CUACUACUAGCTCTTTCTCTTAATATTAGTT	(SEQ ID NO. 4694)
8SH3_HP0775S762	CUACUACUATTTATGATTTCATAAGCGTCATC	(SEQ ID NO. 4695)
8SH4_HP0776S763	CUACUACUATTATCAATTTTCGTTTCATCTAT	(SEQ ID NO. 4696)
8SH5_HP0777S764	CUACUACUATAAAGGCTTATTTTACCATA	(SEQ ID NO. 4697)
8SH6_HP0778S765	CUACUACUACTCAGCGAATCACTAAAAACG	(SEQ ID NO. 4698)
8SH7_HP0779S766	CUACUACUAAAACTAGAGCCTGAAATCTCTC	(SEQ ID NO. 4699)
8SH8_HP0780S767	CUACUACUATATCCCTAGCGCCAATTATA	(SEQ ID NO. 4700)
8SH9_HP0781S768	CUACUACUATCTGAATATTATTCTTTTTTT	(SEQ ID NO. 4701)

8SH10_HP0782S769	CUACUACUAATAGGTTTAAAAAAGAATT	(SEQ ID NO. 4702)
8SH11_HP0783S770	CUACUACUACTATCAATTAGGCTTGGTAGA	(SEQ ID NO. 4703)
8SH12_HP0784S771	CUACUACUATTAGCAAAAAGTTAGCTAAAT	(SEQ ID NO. 4704)
8RA1_HP0685R676	CAUCAUCAUGGTGTTTCTTTTAAAGGAC	(SEQ ID NO. 4705)
8RA2_HP0686R677	CAUCAUCAUTGGTAAATGAAAAGAAATTTA	(SEQ ID NO. 4706)
8RA3_HP0687R678	CAUCAUCAUAACCCCAATGAAAAGAAATCACT	(SEQ ID NO. 4707)
8RA4_HP0688R679	CAUCAUCAUAATGTTGTGCGTGTGTTGATAT	(SEQ ID NO. 4708)
8RA5_HP0689R680	CAUCAUCAUCTATGATGAATATTCCTGGTA	(SEQ ID NO. 4709)
8RA6_HP0690R681	CAUCAUCAUATGAATGAAGTGGTTGTAGTG	(SEQ ID NO. 4710)
8RA7_HP0691R682	CAUCAUCAUAGGAGATGAGATGAATAAGG	(SEQ ID NO. 4711)
8RA8_HP0692R683	CAUCAUCAUAATGAGAGAGGCTATCATTA	(SEQ ID NO. 4712)
8RA9_HP0693R684	CAUCAUCAUATGTTTATTAAGGCATTG	(SEQ ID NO. 4713)
8RA10_HP0694R685	CAUCAUCAUTTTGTTTTCATAATTTATTT	(SEQ ID NO. 4714)
8RA11_HP0695R686	CAUCAUCAUCTAAATGAAAAGACGCAAGAGT	(SEQ ID NO. 4715)
8RA12_HP0696R687	CAUCAUCAUTCAAAAATGGCAAAATTTATTGA	(SEQ ID NO. 4716)
8RB1_HP0697R688	CAUCAUCAUGAATGGTCATGTCAAAAATACA	(SEQ ID NO. 4717)
8RB2_HP0698R689	CAUCAUCAUAGGAAAAGCTATGAAAAGTAAC	(SEQ ID NO. 4718)
8RB3_HP0699R690	CAUCAUCAUTTTTGTGACTAAAAAATTCAT	(SEQ ID NO. 4719)
8RB4_HP0700R691	CAUCAUCAUGCCATGAGTGATTTTCGAAGTC	(SEQ ID NO. 4720)
8RB5_HP0701R692	CAUCAUCAUACACATGCAAGATAATTCAGT	(SEQ ID NO. 4721)
8RB6_HP0702R693	CAUCAUCAUTGAGTGATGCGTTTCTTTTCA	(SEQ ID NO. 4722)
8RB7_HP0703R694	CAUCAUCAUTGAAAAATCGCCATTTGTAGAA	(SEQ ID NO. 4723)
8RB8_HP0704R695	CAUCAUCAUAATGGTCTCTTAACCTCCCTTAA	(SEQ ID NO. 4724)
8RB9_HP0705R696	CAUCAUCAUAAAACCATTTATGGATAAGATC	(SEQ ID NO. 4725)
8RB10_HP0706R697	CAUCAUCAUATGGAATTTATGAAAAAGTTT	(SEQ ID NO. 4726)
8RB11_HP0707R698	CAUCAUCAUGGGGATTTGTTGCAAGAAATAG	(SEQ ID NO. 4727)
8RB12_HP0708R699	CAUCAUCAUTGAGTAAGCCATGAATATCAA	(SEQ ID NO. 4728)
8RC1_HP0709R700	CAUCAUCAUAGGAAATAATACAGATGAGAA	(SEQ ID NO. 4729)
8RC2_HP0710R701	CAUCAUCAUGAGATAACCATGAGAAAACTA	(SEQ ID NO. 4730)
8RC3_HP0711R702	CAUCAUCAUATGTATGCGGCTCATCCTATT	(SEQ ID NO. 4731)
8RC4_HP0712R703	CAUCAUCAUAATGAACTATATAAAGAATTATT	(SEQ ID NO. 4732)
8RC5_HP0714R704	CAUCAUCAUGTATAGACATGGCGATCTTAC	(SEQ ID NO. 4733)

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8RC6_HP0715R705	CAUCAUAGGGTCGTTTGAATGGATATTT	(SEQ ID NO. 4734)
8RC7_HP0716R706	CAUCAUCAUTGTTATGAGAGCGAATTTAGA	(SEQ ID NO. 4735)
8RC8_HP0717R707	CAUCAUCAUATGCAAGTTTGTAGCGTTAAAA	(SEQ ID NO. 4736)
8RC9_HP0718R708	CAUCAUCAUAAAGATGTTTGTGGTTTTTATA	(SEQ ID NO. 4737)
8RC10_HP0719R709	CAUCAUCAUATGGTAAAAATGCCAAAATTG	(SEQ ID NO. 4738)
8RC11_HP0720R710	CAUCAUCAUAAAAAATGCGTGAAAGAGT	(SEQ ID NO. 4739)
8RC12_HP0721R711	CAUCAUCAUAAATGAAAAAAGCGTTGAAAAAT	(SEQ ID NO. 4740)
8RD1_HP0723R712	CAUCAUCAUGGTTATGGCTCAAAATTTACC	(SEQ ID NO. 4741)
8RD2_HP0724R713	CAUCAUCAUGGTTAATGGTTGATGCTTTT	(SEQ ID NO. 4742)
8RD3_HP0726R714	CAUCAUCAUCCGTTATGGGTAGAAATTGAAT	(SEQ ID NO. 4743)
8RD4_HP0727R715	CAUCAUCAUGAGAATAAATGGACTTTTAAAA	(SEQ ID NO. 4744)
8RD5_HP0728R716	CAUCAUCAUAGTGCAAGATTTTAAAAACCCA	(SEQ ID NO. 4745)
8RD6_HP0729R717	CAUCAUCAUATGAACCACTTTTAAATCCTC	(SEQ ID NO. 4746)
8RD7_HP0730R718	CAUCAUCAUGATGTTTCTTCTAAAAATTGCTC	(SEQ ID NO. 4747)
8RD8_HP0731R719	CAUCAUCAUATGAAGAATGAAACGCTAGAA	(SEQ ID NO. 4748)
8RD9_HP0732R720	CAUCAUCAUAAACGCTTGGAATCCTATGGGT	(SEQ ID NO. 4749)
8RD10_HP0733R721	CAUCAUCAUATGAAAAACATTTATCTTGAT	(SEQ ID NO. 4750)
8RD11_HP0734R722	CAUCAUCAUACATGCAAGTTAAAGAAACA	(SEQ ID NO. 4751)
8RD12_HP0735R723	CAUCAUCAUACAATGCATTTATCTTATGAA	(SEQ ID NO. 4752)
8RE1_HP0736R724	CAUCAUCAUATTTTAATGTTGCTTTTCACT	(SEQ ID NO. 4753)
8RE2_HP0737R725	CAUCAUCAUATTTGGATAAAATTAGTCTTCG	(SEQ ID NO. 4754)
8RE3_HP0738R726	CAUCAUCAUGTGGAGTTTTCGCTTTTATTT	(SEQ ID NO. 4755)
8RE4_HP0739R727	CAUCAUCAUATGGCCAAACGAGTATCGCT	(SEQ ID NO. 4756)
8RE5_HP0740R728	CAUCAUCAUTCATCATGCAAAAGTCTTAGTT	(SEQ ID NO. 4757)
8RE6_HP0741R729	CAUCAUCAUGGAAATGAACATGCAACAATTT	(SEQ ID NO. 4758)
8RE7_HP0742R730	CAUCAUCAUCGATGAAAGCGGTGGTTTA	(SEQ ID NO. 4759)
8RE8_HP0743R731	CAUCAUCAUAAACGATGGCATTAGACAAAA	(SEQ ID NO. 4760)
8RE9_HP0745R732	CAUCAUCAUTTGATGCAAAAAGTTTTCAT	(SEQ ID NO. 4761)
8RE10_HP0746R733	CAUCAUCAUTTAGATGAGGTCTTGGATGAA	(SEQ ID NO. 4762)
8RE11_HP0747R734	CAUCAUCAUAGGTTTAAATGCCCATTTT	(SEQ ID NO. 4763)
8RE12_HP0748R735	CAUCAUCAUAGGGAATTGGATGAGTGTGAT	(SEQ ID NO. 4764)
8RF1_HP0749R736	CAUCAUCAUTATGAATACTCTTAAAAAGCA	(SEQ ID NO. 4765)

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8RF2_HP0750R737	CAUCAUAUATGTATAAATTAGGGGTGTTT	(SEQ ID NO. 4766)
8RF3_HP0751R738	CAUCAUAUTGGAGGTTTTTATGGTCAATG	(SEQ ID NO. 4767)
8RF4_HP0752R739	CAUCAUAUAGGTAAACAATGGCAATAGGT	(SEQ ID NO. 4768)
8RF5_HP0753R740	CAUCAUGAACAATTATGCAATACGCTAA	(SEQ ID NO. 4769)
8RF6_HP0754R741	CAUCAUGATGAACCTGCCTAACATTTT	(SEQ ID NO. 4770)
8RF7_HP0755R742	CAUCAUAUTGGTTGTTTAAACGATTTT	(SEQ ID NO. 4771)
8RF8_HP0756R743	CAUCAUGAGATGAAAGATTACGAAGAC	(SEQ ID NO. 4772)
8RF9_HP0757R744	CAUCAUGATTATGAAGAAGAGTGAAAA	(SEQ ID NO. 4773)
8RF10_HP0758R745	CAUCAUAUATGCTAGAAAATAGCTCTATA	(SEQ ID NO. 4774)
8RF11_HP0759R746	CAUCAUAUTTTTAGATGTGCTGGTGGTCG	(SEQ ID NO. 4775)
8RF12_HP0760R747	CAUCAUAUAGAATGCAAAATTGCAACAGCA	(SEQ ID NO. 4776)
8RG1_HP0761R748	CAUCAUAUTGGCTTCAAGCTTTTGT	(SEQ ID NO. 4777)
8RG2_HP0762R749	CAUCAUAUATAATGAGAATTAGGCTTATT	(SEQ ID NO. 4778)
8RG3_HP0763R750	CAUCAUAUATGTTTAAATTTTTCAAAAAA	(SEQ ID NO. 4779)
8RG4_HP0764R751	CAUCAUAUACATGCCATTGCCATTATTA	(SEQ ID NO. 4780)
8RG5_HP0765R752	CAUCAUAUGAAATCATGGAAGAACAAAG	(SEQ ID NO. 4781)
8RG6_HP0766R753	CAUCAUAUAGAGGGGGTAATTTCATGTTAG	(SEQ ID NO. 4782)
8RG7_HP0767R754	CAUCAUAUAGTTCTTATGGAAAAAGTCC	(SEQ ID NO. 4783)
8RG8_HP0768R755	CAUCAUAUAGGGAGTGTAGTAGATAGTT	(SEQ ID NO. 4784)
8RG9_HP0769R756	CAUCAUAUTTGAAAAACCCCTATCATTGAT	(SEQ ID NO. 4785)
8RG10_HP0770R757	CAUCAUAUAAATGGCTGAAGAAGAAAAAC	(SEQ ID NO. 4786)
8RG11_HP0771R758	CAUCAUAUGATTAGGTTGTAGATGAATTT	(SEQ ID NO. 4787)
8RG12_HP0772R759	CAUCAUAUAGTGCTTGTGAGGTTAGGGGT	(SEQ ID NO. 4788)
8RH1_HP0773R760	CAUCAUAUAGAGCTATGGTATCAACACTC	(SEQ ID NO. 4789)
8RH2_HP0774R761	CAUCAUAUGAATGAACATGGAACAAAAAA	(SEQ ID NO. 4790)
8RH3_HP0775R762	CAUCAUAUGATAGATGAACGAAATTGATA	(SEQ ID NO. 4791)
8RH4_HP0776R763	CAUCAUAUACATTGGATAGAACTCAAAAT	(SEQ ID NO. 4792)
8RH5_HP0777R764	CAUCAUAUGGATCATGCAAGCAAAAGATAA	(SEQ ID NO. 4793)
8RH6_HP0778R765	CAUCAUAUAGTGCGTTTGGTAAAAATTGA	(SEQ ID NO. 4794)
8RH7_HP0779R766	CAUCAUAUAGAAATGATGAAAGATTTTTT	(SEQ ID NO. 4795)
8RH8_HP0780R767	CAUCAUAUAGAGTGGCGGTGAAAAAAATC	(SEQ ID NO. 4796)
8RH9_HP0781R768	CAUCAUAUATGCCATACGCCCTTAAGAAAA	(SEQ ID NO. 4797)

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8RH10_HP0782R769	CAUCAUCAUGTGTTAAATTTCAAAATTA	(SEQ ID NO. 4798)
8RH11_HP0783R770	CAUCAUCAUGTGCGTGGCTTTTATTTT	(SEQ ID NO. 4799)
8RH12_HP0784R771	CAUCAUCAUGTGTTGTTACAGTTATTTT	(SEQ ID NO. 4800)
9SA1_HP0785S772	CUACUACUATCATTTGGCGCACAATATCAAT	(SEQ ID NO. 4801)
9SA2_HP0786S773	CUACUACUAAAGGATCTATTTGGCAAATAA	(SEQ ID NO. 4802)
9SA3_HP0787S774	CUACUACUATTAATTCATTCCTTAAACACGCT	(SEQ ID NO. 4803)
9SA4_HP0788S775	CUACUACUAAAGGTTTAAAGCTTCCACACG	(SEQ ID NO. 4804)
9SA5_HP0789S776	CUACUACUACTATTTTAGGGCTTGTTTTTC	(SEQ ID NO. 4805)
9SA6_HP0790S777	CUACUACUATTACGCAAGCTCTTTGCTATT	(SEQ ID NO. 4806)
9SA7_HP0791S778	CUACUACUACAAGGCTTTAAGCTCTCATCG	(SEQ ID NO. 4807)
9SA8_HP0792S779	CUACUACUAAATCCTTTTAAAGAAATCTTTC	(SEQ ID NO. 4808)
9SA9_HP0793S780	CUACUACUATGTTACTCGTGTGTTTTGTTTT	(SEQ ID NO. 4809)
9SA10_HP0794S781	CUACUACUATCACTTACGTTTCTCTGTAA	(SEQ ID NO. 4810)
9SA11_HP0795S782	CUACUACUATTAACCGCTTGAATTTTGTG	(SEQ ID NO. 4811)
9SA12_HP0796S783	CUACUACUAAATAAAGTCAATAAGTTG	(SEQ ID NO. 4812)
9SB1_HP0797S784	CUACUACUATGTTCTTTATCGGTTTCTTTTG	(SEQ ID NO. 4813)
9SB2_HP0798S785	CUACUACUATTTTCTATTTTATAGCGTTAT	(SEQ ID NO. 4814)
9SB3_HP0799S786	CUACUACUACGGCATTTTATCCTATTTGT	(SEQ ID NO. 4815)
9SB4_HP0800S787	CUACUACUAACTCCTTTTAAAGCTAAAGC	(SEQ ID NO. 4816)
9SB5_HP0801S788	CUACUACUAACTAGCCCCCAACACCGGT	(SEQ ID NO. 4817)
9SB6_HP0802S789	CUACUACUAGCACTCATAATTTTCACAATA	(SEQ ID NO. 4818)
9SB7_HP0803S790	CUACUACUAGCTCTTAAATTTGTAAAGTC	(SEQ ID NO. 4819)
9SB8_HP0804S791	CUACUACUACTTAAAGGCTAATCGTTCTTA	(SEQ ID NO. 4820)
9SB9_HP0805S792	CUACUACUATCTAATGTTTGCCAATTTCTGA	(SEQ ID NO. 4821)
9SB10_HP0806S793	CUACUACUATTTAGGGTTGTAATGTTTGA	(SEQ ID NO. 4822)
9SB11_HP0807S794	CUACUACUAGCTCACATACGCTGTGATGCT	(SEQ ID NO. 4823)
9SB12_HP0808S795	CUACUACUAAATTTATTCATTTGACGAAGAA	(SEQ ID NO. 4824)
9SC1_HP0809S796	CUACUACUATTAATTTGGATAATGAAATCAGT	(SEQ ID NO. 4825)
9SC2_HP0810S797	CUACUACUAAATTCCTATTGAAATAAGTTA	(SEQ ID NO. 4826)
9SC3_HP0811S798	CUACUACUATTTTACTGCTGATGATTT	(SEQ ID NO. 4827)
9SC4_HP0812S799	CUACUACUATTACATTTTATTTTTCAC	(SEQ ID NO. 4828)
9SC5_HP0813S800	CUACUACUACAATTAAGCCATCCTTGAAAC	(SEQ ID NO. 4829)

9SC6_HP0814S801	CUACUACUACCCCTTAATCTAAATTTCATA	(SEQ ID NO. 4830)
9SC7_HP0815S802	CUACUACUATTTAGCCCTCAAAATTGAGATT	(SEQ ID NO. 4831)
9SC8_HP0816S803	CUACUACUATCATTTCTTGCTGTTTGTGGGG	(SEQ ID NO. 4832)
9SC9_HP0817S804	CUACUACUAGCAGGTTAAAACTGAAAGGTG	(SEQ ID NO. 4833)
9SC10_HP0818S805	CUACUACUAAATGCTTTATAACCCTAATCTT	(SEQ ID NO. 4834)
9SC11_HP0819S806	CUACUACUATAAAATCACTGCTCTTGTTTA	(SEQ ID NO. 4835)
9SC12_HP0820S807	CUACUACUACATTCATTCCTCAAAAAAACT	(SEQ ID NO. 4836)
9SD1_HP0821S808	CUACUACUATGTTTTTTTCCCTTAGATTCTGT	(SEQ ID NO. 4837)
9SD2_HP0822S809	CUACUACUATCAATTTTCCAAACGAATCAT	(SEQ ID NO. 4838)
9SD3_HP0823S810	CUACUACUAAAATCTAAAAGTGATATTTT	(SEQ ID NO. 4839)
9SD4_HP0824S811	CUACUACUAGCTATTAGCCTAAAGTTTGT	(SEQ ID NO. 4840)
9SD5_HP0825S812	CUACUACUAGATTTAATGGTGTCTTAAATA	(SEQ ID NO. 4841)
9SD6_HP0826S813	CUACUACUAAATTATACAAACTGCCAATATT	(SEQ ID NO. 4842)
9SD7_HP0827S814	CUACUACUATGTTACTAAGACTTTTTAGGA	(SEQ ID NO. 4843)
9SD8_HP0828S815	CUACUACUATTAATGCCCTTCATCGGTTAA	(SEQ ID NO. 4844)
9SD9_HP0829S816	CUACUACUATTTCTTTTACAATTCACCCAT	(SEQ ID NO. 4845)
9SD10_HP0830S817	CUACUACUACCTTAATCTAATTTTAAATCT	(SEQ ID NO. 4846)
9SD11_HP0831S818	CUACUACUAAAGATAAAACGAGCTTATAAGA	(SEQ ID NO. 4847)
9SD12_HP0832S819	CUACUACUAAACCATTTTAAGATTTGATATT	(SEQ ID NO. 4848)
9SE1_HP0833S820	CUACUACUAGCCTAGCTTTGGCATTTCTAAA	(SEQ ID NO. 4849)
9SE2_HP0834S821	CUACUACUAAACGCATAAAAAATTTAATTTT	(SEQ ID NO. 4850)
9SE3_HP0835S822	CUACUACUAAATTCACCTTACCTTCTTCAACT	(SEQ ID NO. 4851)
9SE4_HP0836S823	CUACUACUACTTGGCTAGAGCCAGGCTTG	(SEQ ID NO. 4852)
9SE5_HP0837S824	CUACUACUAAATGATTATAGAGTAAGAGGT	(SEQ ID NO. 4853)
9SE6_HP0838S825	CUACUACUATTCATTGGAGCTCGCTGTCTAG	(SEQ ID NO. 4854)
9SE7_HP0839S826	CUACUACUATTAACGAGGATAGCCCTAAAGA	(SEQ ID NO. 4855)
9SE8_HP0840S827	CUACUACUATCATAATAATTTCAACAAATC	(SEQ ID NO. 4856)
9SE9_HP0841S828	CUACUACUAGCATTAAAGGGCGTTGTCTTT	(SEQ ID NO. 4857)
9SE10_HP0842S829	CUACUACUACTACCCCTATCGTGTCCCAACAA	(SEQ ID NO. 4858)
9SE11_HP0843S830	CUACUACUACTCAGCATTTGTTTAAAGTT	(SEQ ID NO. 4859)
9SE12_HP0844S831	CUACUACUATCAACAAGCTCTTTTGATACT	(SEQ ID NO. 4860)
9SF1_HP0845S832	CUACUACUATTTTCAACCACCTCTTCCTTAATA	(SEQ ID NO. 4861)

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9SF2_HP0846S833	CUACUACUACTATTTTTCATTAACTCATC	(SEQ ID NO. 4862.)
9SF3_HP0847S834	CUACUACUACCCCTTCTAGCTCTGCTTCGC	(SEQ ID NO. 4863.)
9SF4_HP0848S835	CUACUACUAACTCATGTATTCTCTGTTTTT	(SEQ ID NO. 4864.)
9SF5_HP0849S836	CUACUACUATTTTCCCTATTGTTCCAGTTCC	(SEQ ID NO. 4865.)
9SF6_HP0850S837	CUACUACUATTTGCTCTCTATTTTATGCATTTT	(SEQ ID NO. 4866.)
9SF7_HP0851S838	CUACUACUAAAAGCCCTTTATTGATTATAAG	(SEQ ID NO. 4867.)
9SF8_HP0852S839	CUACUACUATTAAGAAAGAAAGCGATGGTT	(SEQ ID NO. 4868.)
9SF9_HP0853S840	CUACUACUATGCGGTTTTCATTTTGTGCTCG	(SEQ ID NO. 4869.)
9SF10_HP0854S841	CUACUACUATTTAGATTGCGTCTCCATTGA	(SEQ ID NO. 4870.)
9SF11_HP0855S842	CUACUACUATCCCTAAATAATTAATAACAAA	(SEQ ID NO. 4871.)
9SF12_HP0856S843	CUACUACUAAAGCCCTAATTTTGAATTTCTT	(SEQ ID NO. 4872.)
9SG1_HP0857S844	CUACUACUACTAATTTTATGAGCGGAAATG	(SEQ ID NO. 4873.)
9SG2_HP0858S845	CUACUACUATCAATCATTTGCATGTCCTTTT	(SEQ ID NO. 4874.)
9SG3_HP0859S846	CUACUACUATTTTTCATGCGCACTGTCCT	(SEQ ID NO. 4875.)
9SG4_HP0860S847	CUACUACUATAACGCATTTCTGTCTCTTATT	(SEQ ID NO. 4876.)
9SG5_HP0861S848	CUACUACUATTTGTAGTGTTCATGCGAATG	(SEQ ID NO. 4877.)
9SG6_HP0862S849	CUACUACUATCATTTTGCATTTCTAGTATCCC	(SEQ ID NO. 4878.)
9SG7_HP0863S850	CUACUACUAGCCTACTTCTTATTTCATTTCT	(SEQ ID NO. 4879.)
9SG8_HP0864S851	CUACUACUAAAATCAATGCGTTCCTTGAATG	(SEQ ID NO. 4880.)
9SG9_HP0865S852	CUACUACUACTTAATGCTCATGCGCTTACTC	(SEQ ID NO. 4881.)
9SG10_HP0866S853	CUACUACUAGATTTTAATTTTCATCAAAAAC	(SEQ ID NO. 4882.)
9SG11_HP0867S854	CUACUACUAAAGTAGAGATTATAGTAAAAAT	(SEQ ID NO. 4883.)
9SG12_HP0868S855	CUACUACUACGTGGGCATTAATTGTCTTTC	(SEQ ID NO. 4884.)
9SH1_HP0869S856	CUACUACUACGGTTATTCCGCTAACATTC	(SEQ ID NO. 4885.)
9SH2_HP0870S857	CUACUACUACTTATTGCTTAAGATTCAATA	(SEQ ID NO. 4886.)
9SH3_HP0871S858	CUACUACUAACTCGCTTTAGTGCAAAAATCG	(SEQ ID NO. 4887.)
9SH4_HP0872S859	CUACUACUATTCCTAAGCTTTTGTGAGGAA	(SEQ ID NO. 4888.)
9SH5_HP0873S860	CUACUACUAAATCATTTTGTAGAAAAAATCA	(SEQ ID NO. 4889.)
9SH6_HP0874S861	CUACUACUATTAGACAATCGTATAGGACAC	(SEQ ID NO. 4890.)
9SH7_HP0875S862	CUACUACUATTACTTTTCTTTTGTGTG	(SEQ ID NO. 4891.)
9SH8_HP0876S863	CUACUACUAGCTCCATTAACCATTTGT	(SEQ ID NO. 4892.)
9SH9_HP0877S864	CUACUACUAAAGTGGCTTACAAATGGTAGTT	(SEQ ID NO. 4893.)

9SH10_HP0878S865	CUACUACUATCAAAGGTTGGGTGGTATAA	(SEQ ID NO. 4894)
9SH11_HP0879S866	CUACUACUATTAGTTTAAAGCCAGTTGGT	(SEQ ID NO. 4895)
9SH12_HP0880S867	CUACUACUAGTTCATTGAGCCATTAAAGCC	(SEQ ID NO. 4896)
9RA1_HP0785R772	CAUCAUCAUTAAATGAGAGCTTTTAAAGA	(SEQ ID NO. 4897)
9RA2_HP0786R773	CAUCAUCAUTGATAAAGCAATCATTTGA	(SEQ ID NO. 4898)
9RA3_HP0787R774	CAUCAUCAUTTTGCCAAATAGATCCTTAAT	(SEQ ID NO. 4899)
9RA4_HP0788R775	CAUCAUCAUTGAAGTATAAAGTTGCATCT	(SEQ ID NO. 4900)
9RA5_HP0789R776	CAUCAUCAUAGGCATAACATGAATTACGAA	(SEQ ID NO. 4901)
9RA6_HP0790R777	CAUCAUCAUGGGGCAAAATGCATAAAATAG	(SEQ ID NO. 4902)
9RA7_HP0791R778	CAUCAUCAUTGCAAGAATACCATTCAT	(SEQ ID NO. 4903)
9RA8_HP0792R779	CAUCAUCAUGGAGTAACAACCATGATTAAC	(SEQ ID NO. 4904)
9RA9_HP0793R780	CAUCAUCAUGCATGGCGTTATTAGAGATTA	(SEQ ID NO. 4905)
9RA10_HP0794R781	CAUCAUCAUGAGAGATGATGGGATACATTC	(SEQ ID NO. 4906)
9RA11_HP0795R782	CAUCAUCAUAAAAATGAATCTTGAAGTGAA	(SEQ ID NO. 4907)
9RA12_HP0796R783	CAUCAUCAUAGAACGCTTGAACAAACTGCT	(SEQ ID NO. 4908)
9RB1_HP0797R784	CAUCAUCAUTAGAACGATGAAAGCAAAATAA	(SEQ ID NO. 4909)
9RB2_HP0798R785	CAUCAUCAUTGCCGCTCACTCATTTGAAT	(SEQ ID NO. 4910)
9RB3_HP0799R786	CAUCAUCAUAAATGCAACGATTCATATAG	(SEQ ID NO. 4911)
9RB4_HP0800R787	CAUCAUCAUGGTGTTAAATAATCATCAAGG	(SEQ ID NO. 4912)
9RB5_HP0801R788	CAUCAUCAUAAATGATGGTAGAAGTGGATT	(SEQ ID NO. 4913)
9RB6_HP0802R789	CAUCAUCAUAGTATCCTTGAAACGATTAGA	(SEQ ID NO. 4914)
9RB7_HP0803R790	CAUCAUCAUCCTGATGAGAGTAATAATAGA	(SEQ ID NO. 4915)
9RB8_HP0804R791	CAUCAUCAUTAGAAATGATCTTAAACGAGT	(SEQ ID NO. 4916)
9RB9_HP0805R792	CAUCAUCAUTGCCGTGTTTATTATTATTCAT	(SEQ ID NO. 4917)
9RB10_HP0806R793	CAUCAUCAUTGTTAGATGATATTCCTATT	(SEQ ID NO. 4918)
9RB11_HP0807R794	CAUCAUCAUTGAATGGTTATTGAGAGTA	(SEQ ID NO. 4919)
9RB12_HP0808R795	CAUCAUCAUTGATTGGCATAGATATTGTC	(SEQ ID NO. 4920)
9RC1_HP0809R796	CAUCAUCAUCATGGCAGAAGAACAGAAAA	(SEQ ID NO. 4921)
9RC2_HP0810R797	CAUCAUCAUTGCCAAATCATCAGCCAGTA	(SEQ ID NO. 4922)
9RC3_HP0811R798	CAUCAUCAUGGGTTTTTTGAAAAATTTTCT	(SEQ ID NO. 4923)
9RC4_HP0812R799	CAUCAUCAUGAAATCGTGGCATCGTTTGG	(SEQ ID NO. 4924)
9RC5_HP0813R800	CAUCAUCAUGTTGGAGTTTGGAAATTTTA	(SEQ ID NO. 4925)

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9RC6_HP0814R801	CAUCAUCAUAATGTTAAGCCGCTAGAAA	(SEQ ID NO. 4926)
9RC7_HP0815R802	CAUCAUCAUGTTTTTGATTTATCAACCATA	(SEQ ID NO. 4927)
9RC8_HP0816R803	CAUCAUCAUAAGATGGCTAAGAAAAACAAA	(SEQ ID NO. 4928)
9RC9_HP0817R804	CAUCAUCAUGAATGAATCGCATGAATAAAA	(SEQ ID NO. 4929)
9RC10_HP0818R805	CAUCAUCAUAGTTTGGTTATAATGCTAGGC	(SEQ ID NO. 4930)
9RC11_HP0819R806	CAUCAUCAUATGAAAGAAAATCGTTACAATA	(SEQ ID NO. 4931)
9RC12_HP0820R807	CAUCAUCAUATGGAACAAAATATTTCTCC	(SEQ ID NO. 4932)
9RD1_HP0821R808	CAUCAUCAUTGAATGGCTGATTATTGTCC	(SEQ ID NO. 4933)
9RD2_HP0822R809	CAUCAUCAUCATGAAAAAAGATTGAATAT	(SEQ ID NO. 4934)
9RD3_HP0823R810	CAUCAUCAUTGAATGCGCTTTTGAACAAC	(SEQ ID NO. 4935)
9RD4_HP0824R811	CAUCAUCAUTAATGAGTCACTATATTGAAT	(SEQ ID NO. 4936)
9RD5_HP0825R812	CAUCAUCAUATGATAGATTGCGCGATTATT	(SEQ ID NO. 4937)
9RD6_HP0826R813	CAUCAUCAUTTTGCGTGTTTTGGCCATTTC	(SEQ ID NO. 4938)
9RD7_HP0827R814	CAUCAUCAUGAATTTTATCTTTGAGAAAACAT	(SEQ ID NO. 4939)
9RD8_HP0828R815	CAUCAUCAUATGGAACACACAGAGTATTTACT	(SEQ ID NO. 4940)
9RD9_HP0829R816	CAUCAUCAUAAGGATAGAAAAATGAGAAATT	(SEQ ID NO. 4941)
9RD10_HP0830R817	CAUCAUCAUGCTAAAAACATGATCACTTA	(SEQ ID NO. 4942)
9RD11_HP0831R818	CAUCAUCAUGACAATATCAAAATCTTAAAT	(SEQ ID NO. 4943)
9RD12_HP0832R819	CAUCAUCAUTTATGTGGATCACCCCAAGAAA	(SEQ ID NO. 4944)
9RE1_HP0833R820	CAUCAUCAUCGTTGTTTTTTAGTCAAAAAAAA	(SEQ ID NO. 4945)
9RE2_HP0834R821	CAUCAUCAUAGATGAATACAAAGCCATAAAA	(SEQ ID NO. 4946)
9RE3_HP0835R822	CAUCAUCAUCATGAACAAAGCGGAATTTAT	(SEQ ID NO. 4947)
9RE4_HP0836R823	CAUCAUCAUAATGCCCATGCGTTTGACACAC	(SEQ ID NO. 4948)
9RE5_HP0837R824	CAUCAUCAUCCTAATAAATGTCATTGAATTG	(SEQ ID NO. 4949)
9RE6_HP0838R825	CAUCAUCAUCTCTATAATCATGCGGTATTT	(SEQ ID NO. 4950)
9RE7_HP0839R826	CAUCAUCAUATGAAAAAACTTTTCCCACTT	(SEQ ID NO. 4951)
9RE8_HP0840R827	CAUCAUCAUACATGCCAAATCATCAAAAAACA	(SEQ ID NO. 4952)
9RE9_HP0841R828	CAUCAUCAUTATTATGAATTTTGTAGAAGA	(SEQ ID NO. 4953)
9RE10_HP0842R829	CAUCAUCAUCCCTTTAATGCTAGAAGCCCT	(SEQ ID NO. 4954)
9RE11_HP0843R830	CAUCAUCAUTTTGTTTGTGCGGATTTGTTG	(SEQ ID NO. 4955)
9RE12_HP0844R831	CAUCAUCAUGGAAGAGTGGTGAAAAATTTAC	(SEQ ID NO. 4956)
9RF1_HP0845R832	CAUCAUCAUCGCCGTTTAAATGGATTTTGT	(SEQ ID NO. 4957)

9RF2_HP0846R833	CAUCAUAGCCCTTGCAAGTGATCCACCAA	(SEQ ID NO. 4958)
9RF3_HP0847R834	CAUCAUAGGAATAACATGAGTTACGAAA	(SEQ ID NO. 4959)
9RF4_HP0848R835	CAUCAUAUATGTTTGTCTTTGAAAATTG	(SEQ ID NO. 4960)
9RF5_HP0849R836	CAUCAUAGGGGGCAAAATGCATAAAATA	(SEQ ID NO. 4961)
9RF6_HP0850R837	CAUCAUCAUCATGGAAAACAACCCAAACAA	(SEQ ID NO. 4962)
9RF7_HP0851R838	CAUCAUCAUTTGAATGGTATTTGACAGAAC	(SEQ ID NO. 4963)
9RF8_HP0852R839	CAUCAUCAUAATGAAACCGCAAGACATTGA	(SEQ ID NO. 4964)
9RF9_HP0853R840	CAUCAUCAUAGATGCTACAAACCATCAACT	(SEQ ID NO. 4965)
9RF10_HP0854R841	CAUCAUCAUCATGTTCATTGAAAAGTGTGGA	(SEQ ID NO. 4966)
9RF11_HP0855R842	CAUCAUCAUAATGCTAGCTTCCATCATCTC	(SEQ ID NO. 4967)
9RF12_HP0856R843	CAUCAUCAUATGGAAATTTTATAAAAAACAA	(SEQ ID NO. 4968)
9RG1_HP0857R844	CAUCAUCAUGACATGCAATGATTGATAATT	(SEQ ID NO. 4969)
9RG2_HP0858R845	CAUCAUCAUCGCATGAAAAAAATCTTAGTC	(SEQ ID NO. 4970)
9RG3_HP0859R846	CAUCAUCAUAGAATGCGTTATATTGATGAT	(SEQ ID NO. 4971)
9RG4_HP0860R847	CAUCAUCAUCATTCGCATGAACACTAACAA	(SEQ ID NO. 4972)
9RG5_HP0861R848	CAUCAUCAUGAATGCAAAATGATGCACAATT	(SEQ ID NO. 4973)
9RG6_HP0862R849	CAUCAUCAUATGCCAGCTAGGCAATCTTT	(SEQ ID NO. 4974)
9RG7_HP0863R850	CAUCAUCAUATGAATAAACCATTTTAAATC	(SEQ ID NO. 4975)
9RG8_HP0864R851	CAUCAUCAUGGCATGAGCATTAAAGGAAAAT	(SEQ ID NO. 4976)
9RG9_HP0865R852	CAUCAUCAUATGAAAATAATAAATCCAAAAA	(SEQ ID NO. 4977)
9RG10_HP0866R853	CAUCAUCAUATGAATAAAGAACCTATGAGT	(SEQ ID NO. 4978)
9RG11_HP0867R854	CAUCAUCAUATGCCACGATTTTAGTGAGC	(SEQ ID NO. 4979)
9RG12_HP0868R855	CAUCAUCAUACCGATGCAAGAAGAAATTGAA	(SEQ ID NO. 4980)
9RH1_HP0869R856	CAUCAUCAUGTTTAGTATGCATGAATACTC	(SEQ ID NO. 4981)
9RH2_HP0870R857	CAUCAUCAUCATGCTTAGGTCTTTATGGTC	(SEQ ID NO. 4982)
9RH3_HP0871R858	CAUCAUCAUCAAGGAGCAAAAAGATGAAA	(SEQ ID NO. 4983)
9RH4_HP0872R859	CAUCAUCAUCATGCAAGATTTACCCCATG	(SEQ ID NO. 4984)
9RH5_HP0873R860	CAUCAUCAUTTGTCTTTTATGCGAGAAATTT	(SEQ ID NO. 4985)
9RH6_HP0874R861	CAUCAUCAUTATGAAACGAAAGGATTTTAT	(SEQ ID NO. 4986)
9RH7_HP0875R862	CAUCAUCAUAAGATGGTTAATAAAGATGTG	(SEQ ID NO. 4987)
9RH8_HP0876R863	CAUCAUCAUGTTGTTGGATGTTTTTAAAGAG	(SEQ ID NO. 4988)
9RH9_HP0877R864	CAUCAUCAUATGCGTATTTTAGGAATAGAT	(SEQ ID NO. 4989)

9RH10_HP0878R865	CAUCAUAAATGAAGCAACACAATCAT	(SEQ ID NO. 4990)
9RH11_HP0879R866	CAUCAUGGATGATGAATGGGATCAGTC	(SEQ ID NO. 4991)
9RH12_HP0880R867	CAUCAUGAAGATAATCAAAAATGAA	(SEQ ID NO. 4992)
10SA1_HP0881S868	CUACUACUAATTTTGTGATTATCTTCAAT	(SEQ ID NO. 4993)
10SA2_HP0883S869	CUACUACUATTTTAAGAGCGCAGTTGTTGT	(SEQ ID NO. 4994)
10SA3_HP0884S870	CUACUACUATTTCTTGTCTAGCCTTTTAT	(SEQ ID NO. 4995)
10SA4_HP0885S871	CUACUACUAAAAACATTTAAAAACCTTGAAA	(SEQ ID NO. 4996)
10SA5_HP0886S872	CUACUACUAGGAGGTGTTTAAAAAACTTC	(SEQ ID NO. 4997)
10SA6_HP0887S873	CUACUACUATATTAGAAACTATACCTCAT	(SEQ ID NO. 4998)
10SA7_HP0888S874	CUACUACUACCTCTACAAACGCATACACCAC	(SEQ ID NO. 4999)
10SA8_HP0889S875	CUACUACUATCACACCCCTAGTTCTTAAA	(SEQ ID NO. 5000)
10SA9_HP0890S876	CUACUACUATTAAGCATCACGCTTCCTTTT	(SEQ ID NO. 5001)
10SA10_HP0891S877	CUACUACUATTTAAACACCCCTCGTGTTC	(SEQ ID NO. 5002)
10SA11_HP0892S878	CUACUACUAGGTGTGGGCGGTTCAAACACAG	(SEQ ID NO. 5003)
10SA12_HP0893S879	CUACUACUATTAAGTTTTCACAATGCTT	(SEQ ID NO. 5004)
10SB1_HP0894S880	CUACUACUAAAGGGGTGTGGGTGGATTAAA	(SEQ ID NO. 5005)
10SB2_HP0895S881	CUACUACUATTTTAAAGATTGAGCTTCAAC	(SEQ ID NO. 5006)
10SB3_HP0896S882	CUACUACUATTAGTAAGCGAACACATAATT	(SEQ ID NO. 5007)
10SB4_HP0897S883	CUACUACUAAATGGTCAGCTCTCAAGGGGC	(SEQ ID NO. 5008)
10SB5_HP0898S884	CUACUACUAGGGGCTTAGAGCAATTTTCAA	(SEQ ID NO. 5009)
10SB6_HP0899S885	CUACUACUATATTATGCGTTTCGTTCAAT	(SEQ ID NO. 5010)
10SB7_HP0900S886	CUACUACUATTAACGAATGCGTGGACTG	(SEQ ID NO. 5011)
10SB8_HP0901S887	CUACUACUACCGCTATCCTACCTTATCAT	(SEQ ID NO. 5012)
10SB9_HP0902S888	CUACUACUATTTTCCTTATTTTTCATTAA	(SEQ ID NO. 5013)
10SB10_HP0905S889	CUACUACUAGCTTTCAAATCCTTTTCATCT	(SEQ ID NO. 5014)
10SB11_HP0906S890	CUACUACUAGCTTAAATCAGGCATAAAGA	(SEQ ID NO. 5015)
10SB12_HP0907S891	CUACUACUAGTGTGTTTCATGCTGTCTCCT	(SEQ ID NO. 5016)
10SC1_HP0908S892	CUACUACUACCTTTTATTTTTCAGCTAA	(SEQ ID NO. 5017)
10SC2_HP0909S893	CUACUACUATTATCAAAAAATTTCTCCAAA	(SEQ ID NO. 5018)
10SC3_HP0910S894	CUACUACUATTTATCCTAGATTAAAAAGT	(SEQ ID NO. 5019)
10SC4_HP0911S895	CUACUACUAAACCAATTTTATTTGAATCGG	(SEQ ID NO. 5020)
10SC5_HP0912S896	CUACUACUACTTAGAATGAATACCCATAAG	(SEQ ID NO. 5021)

10SC6_HP0913S897	CUACUACUATTTAGAGCGGTAGCCATAGA	(SEQ ID NO. 5022)
10SC7_HP0914S898	CUACUACUATCAAAACTTCAGCGTGAGGTT	(SEQ ID NO. 5023)
10SC8_HP0915S899	CUACUACUATCCATTATTAAACTTATAG	(SEQ ID NO. 5024)
10SC9_HP0916S900	CUACUACUAGCCATCACATTGTTTGCTCG	(SEQ ID NO. 5025)
10SC10_HP0917S901	CUACUACUATCAAGCGATAATCTCTTGAAA	(SEQ ID NO. 5026)
10SC11_HP0918S902	CUACUACUATCTTTTATCTTATCTTCAC	(SEQ ID NO. 5027)
10SC12_HP0919S903	CUACUACUACGCCATCAAAATTACTTCAAAT	(SEQ ID NO. 5028)
10SD1_HP0920S904	CUACUACUACTATGTGTCTCTGTCTGAAAA	(SEQ ID NO. 5029)
10SD2_HP0921S905	CUACUACUAAAAATGACTTAATAATGATACA	(SEQ ID NO. 5030)
10SD3_HP0922S906	CUACUACUAAATGATACCATTAAAGCATA	(SEQ ID NO. 5031)
10SD4_HP0923S907	CUACUACUACCCCTAAATAACTATAAACGT	(SEQ ID NO. 5032)
10SD5_HP0924S908	CUACUACUATTTAGTTTTTTTGCCTCAAAT	(SEQ ID NO. 5033)
10SD6_HP0925S909	CUACUACUATCATGTCTTTGATCCTTGAATT	(SEQ ID NO. 5034)
10SD7_HP0926S910	CUACUACUATCAAAATTCGTCAATTTTC	(SEQ ID NO. 5035)
10SD8_HP0927S911	CUACUACUAAAAAAATTTTCCATTTAAATC	(SEQ ID NO. 5036)
10SD9_HP0928S912	CUACUACUAGAATTATAACCTAAGATTTTA	(SEQ ID NO. 5037)
10SD10_HP0929S913	CUACUACUATCATGTCTTGCCCTTTAAATAG	(SEQ ID NO. 5038)
10SD11_HP0930S914	CUACUACUAGCTTTTACTCACTTTAACAT	(SEQ ID NO. 5039)
10SD12_HP0931S915	CUACUACUACTCATTTAAAAATTTGCTCGCTA	(SEQ ID NO. 5040)
10SE1_HP0932S916	CUACUACUAAACATTTTCATTGCTTATAACA	(SEQ ID NO. 5041)
10SE2_HP0933S917	CUACUACUACATTTTAAAGGATCTGGTGT	(SEQ ID NO. 5042)
10SE3_HP0934S918	CUACUACUAACTTTTAAACCCCTTTTGA	(SEQ ID NO. 5043)
10SE4_HP0935S919	CUACUACUATGGATGCACCAATCAAGACAA	(SEQ ID NO. 5044)
10SE5_HP0936S920	CUACUACUACGCATCCTTCATGCTGTGGGC	(SEQ ID NO. 5045)
10SE6_HP0937S921	CUACUACUATATATTCTTTGAGCCATATC	(SEQ ID NO. 5046)
10SE7_HP0938S922	CUACUACUAGCGAGGTTAAACGCTGTTGGC	(SEQ ID NO. 5047)
10SE8_HP0939S923	CUACUACUACCAACTTAAATTTAAGATTTT	(SEQ ID NO. 5048)
10SE9_HP0940S924	CUACUACUAAATAGGCTGGCTGACATCTT	(SEQ ID NO. 5049)
10SE10_HP0941S925	CUACUACUATFGCATGGTTTGATTTTAAAT	(SEQ ID NO. 5050)
10SE11_HP0942S926	CUACUACUACTTTTAAACATGCCATTTTAC	(SEQ ID NO. 5051)
10SE12_HP0943S927	CUACUACUACTTAAATCCCTAAATAATGCAG	(SEQ ID NO. 5052)
10SF1_HP0944S928	CUACUACUATTACTTAAATGGCTATCGCTTC	(SEQ ID NO. 5053)

10SF2_HP0945S929	CUACUACUAATTCAAGAGGATTTAAGATTG	(SEQ ID NO. 5054)
10SF3_HP0946S930	CUACUACUAATTCAAGTTTITAGATTTTCAC	(SEQ ID NO. 5055)
10SF4_HP0947S931	CUACUACUAATTAAAAACGCACCCACCATAGT	(SEQ ID NO. 5056)
10SF5_HP0948S932	CUACUACUACCTACAAAAACGCTTCTAACT	(SEQ ID NO. 5057)
10SF6_HP0949S933	CUACUACUAGCACCTCCTATTTATGGTATG	(SEQ ID NO. 5058)
10SF7_HP0950S934	CUACUACUAGCTTTAAAAAATCTTTGAAGTC	(SEQ ID NO. 5059)
10SF8_HP0951S935	CUACUACUAACTTTTCAAAACCCCTAAATTC	(SEQ ID NO. 5060)
10SF9_HP0952S936	CUACUACUAGTTTGTGCGTTAAGGTAGTTT	(SEQ ID NO. 5061)
10SF10_HP0953S937	CUACUACUAACTACCTTAACGCACAAACG	(SEQ ID NO. 5062)
10SF11_HP0954S938	CUACUACUATAATCACAAACCAAGTAATCGC	(SEQ ID NO. 5063)
10SF12_HP0955S939	CUACUACUAAATTTCAATTGATTTTCCTTTA	(SEQ ID NO. 5064)
10SG1_HP0956S940	CUACUACUAAATCCTTAAATTTCAAAATCT	(SEQ ID NO. 5065)
10SG2_HP0957S941	CUACUACUATGTTTATCTTTTAAATGTTT	(SEQ ID NO. 5066)
10SG3_HP0958S942	CUACUACUAACTTAAACAATCAAACTAAT	(SEQ ID NO. 5067)
10SG4_HP0959S943	CUACUACUACGCTTTCCTTTAAATGATTG	(SEQ ID NO. 5068)
10SG5_HP0960S944	CUACUACUACTTAACCTAACGCCATTTTCAG	(SEQ ID NO. 5069)
10SG6_HP0961S945	CUACUACUACCTTTTAAAGCGCTGTGATCA	(SEQ ID NO. 5070)
10SG7_HP0962S946	CUACUACUAAAGCGTTAAATTAGTTGTTTCT	(SEQ ID NO. 5071)
10SG8_HP0963S947	CUACUACUATCTTCAATCATCGTCCCTCTT	(SEQ ID NO. 5072)
10SG9_HP0964S948	CUACUACUATAACGCTCATTGAATCCCCCTT	(SEQ ID NO. 5073)
10SG10_HP0965S949	CUACUACUATTAAGAATAATAAGCTTTTCTT	(SEQ ID NO. 5074)
10SG11_HP0966S950	CUACUACUAGTTTCATTGTTGATCCTTTAAA	(SEQ ID NO. 5075)
10SG12_HP0967S951	CUACUACUACAATTTCAATAAAACAATCTTG	(SEQ ID NO. 5076)
10SH1_HP0968S952	CUACUACUATCAAAAGCCTTTTTCAAACGAA	(SEQ ID NO. 5077)
10SH2_HP0969S953	CUACUACUAACTCAACGATTTTAATCTTT	(SEQ ID NO. 5078)
10SH3_HP0970S954	CUACUACUAAATCATCTCCTCCCTAAATGT	(SEQ ID NO. 5079)
10SH4_HP0971S955	CUACUACUATCAATGCAATTTCTCCTAATCT	(SEQ ID NO. 5080)
10SH5_HP0972S956	CUACUACUACTAAATCGCAATTTCTTTAAT	(SEQ ID NO. 5081)
10SH6_HP0973S957	CUACUACUATTTAGGACTTTTAAAGCTCT	(SEQ ID NO. 5082)
10SH7_HP0974S958	CUACUACUATTAATAATAGGGTTCGTCCAT	(SEQ ID NO. 5083)
10SH8_HP0975S959	CUACUACUACTATTCAATGATCTTTGGGCAC	(SEQ ID NO. 5084)
10SH9_HP0976S960	CUACUACUATTCAGCCCTTTTCTTAACTCAT	(SEQ ID NO. 5085)

10SH10_HP0977S961	CUACUACUATTTATTGAATGTATTGACTA	(SEQ ID NO. 5086)
10SH11_HP0978S962	CUACUACUATCTTAAAAAGAATTTAGAAATC	(SEQ ID NO. 5087)
10SH12_HP0979S963	CUACUACUATCAGTCTTGTGGATTCTCAT	(SEQ ID NO. 5088)
10RA1_HP0881R868	CAUCAUCAUTGTGGGTATAAATGCAAAAAGT	(SEQ ID NO. 5089)
10RA2_HP0883R869	CAUCAUCAUAATGATAGTGGTTTGATAGG	(SEQ ID NO. 5090)
10RA3_HP0884R870	CAUCAUCAUAAAAAATGAGCTTGGAGCGTT	(SEQ ID NO. 5091)
10RA4_HP0885R871	CAUCAUCAUTTTGATGATGGCTAATATTCT	(SEQ ID NO. 5092)
10RA5_HP0886R872	CAUCAUCAUAGGTTTTTTAAATGTTTATTTA	(SEQ ID NO. 5093)
10RA6_HP0887R873	CAUCAUCAUAGAAAGGAAAAAATGGAAAT	(SEQ ID NO. 5094)
10RA7_HP0888R874	CAUCAUCAUGGGTGTGATGGTTTTTAGAAGT	(SEQ ID NO. 5095)
10RA8_HP0889R875	CAUCAUCAUGCGTGATGCTTAAAAACCTATC	(SEQ ID NO. 5096)
10RA9_HP0890R876	CAUCAUCAUTGCTGTGTAGATCAAGGGTAT	(SEQ ID NO. 5097)
10RA10_HP0891R877	CAUCAUCAUAATGCCTCAAAATACAATCATC	(SEQ ID NO. 5098)
10RA11_HP0892R878	CAUCAUCAUAAAAATGCTGACGATTGAAAC	(SEQ ID NO. 5099)
10RA12_HP0893R879	CAUCAUCAUAAACATGCCAAACACCACCAAC	(SEQ ID NO. 5100)
10RB1_HP0894R880	CAUCAUCAUGGTGTTGAAGCTCAATCTTAA	(SEQ ID NO. 5101)
10RB2_HP0895R881	CAUCAUCAUTTTGGTATTTTTTAAAAAAGGAA	(SEQ ID NO. 5102)
10RB3_HP0896R882	CAUCAUCAUAAAAACATGAAAAAAACCCCTT	(SEQ ID NO. 5103)
10RB4_HP0897R883	CAUCAUCAUGGAATGCCAGGACCACCAACCT	(SEQ ID NO. 5104)
10RB5_HP0898R884	CAUCAUCAUACAATGAGCGTTGATCACCTC	(SEQ ID NO. 5105)
10RB6_HP0899R885	CAUCAUCAUTGTGTTTGTAGCGATCCCTCT	(SEQ ID NO. 5106)
10RB7_HP0900R886	CAUCAUCAUGAACACAACATGAGCGAACACG	(SEQ ID NO. 5107)
10RB8_HP0901R887	CAUCAUCAUAAATGATGAAAGCCGTTTTTA	(SEQ ID NO. 5108)
10RB9_HP0902R888	CAUCAUCAUTTTTGATGGAAGTGGTTCATTT	(SEQ ID NO. 5109)
10RB10_HP0905R889	CAUCAUCAUGCATGCAAGGTTTATGGATTT	(SEQ ID NO. 5110)
10RB11_HP0906R890	CAUCAUCAUAAAGGATAACCATGCCATCTCC	(SEQ ID NO. 5111)
10RB12_HP0907R891	CAUCAUCAUATGGCTATTGATTTAGCAGAA	(SEQ ID NO. 5112)
10RC1_HP0908R892	CAUCAUCAUCATGAACGACACCTTATTAAA	(SEQ ID NO. 5113)
10RC2_HP0909R893	CAUCAUCAUTAATGATACCCACACAGCTTA	(SEQ ID NO. 5114)
10RC3_HP0910R894	CAUCAUCAUTTTGAATAATTTAGACATTAA	(SEQ ID NO. 5115)
10RC4_HP0911R895	CAUCAUCAUCTTGTAGAAACTTTGCAATT	(SEQ ID NO. 5116)
10RC5_HP0912R896	CAUCAUCAUAAATCATGATAAAGAAAAATA	(SEQ ID NO. 5117)

10RC6_HP0913R897	CAUCAUGAGACAAACATGAAACAAAAT	(SEQ ID NO. 5118)
10RC7_HP0914R898	CAUCAUGAGAGATTTAGTGAGGCAAGAA	(SEQ ID NO. 5119)
10RC8_HP0915R899	CAUCAUATGGCTAAGATCAATGGTTAT	(SEQ ID NO. 5120)
10RC9_HP0916R900	CAUCAUATGAATGACAAGCGTTTTAGA	(SEQ ID NO. 5121)
10RC10_HP0917R901	CAUCAUCGATAATGTCCCCCTTAACCC	(SEQ ID NO. 5122)
10RC11_HP0918R902	CAUCAUTGATGGCGTTAGTGATCTCG	(SEQ ID NO. 5123)
10RC12_HP0919R903	CAUCAUACATTCTTTCTTTAAGGATTA	(SEQ ID NO. 5124)
10RD1_HP0920R904	CAUCAUGAGTAAACATGGCATGTAT	(SEQ ID NO. 5125)
10RD2_HP0921R905	CAUCAUCGATGAAAAATTTTATCAATG	(SEQ ID NO. 5126)
10RD3_HP0922R906	CAUCAUAAATGGCGTTTAAAAAGGCCAG	(SEQ ID NO. 5127)
10RD4_HP0923R907	CAUCAUCACCCCATGCAATTTCAAAAAG	(SEQ ID NO. 5128)
10RD5_HP0924R908	CAUCAUATGCCGTTTATCAATATCAAA	(SEQ ID NO. 5129)
10RD6_HP0925R909	CAUCAUAAACAGAAATGAATACTTATAA	(SEQ ID NO. 5130)
10RD7_HP0926R910	CAUCAUATCAAAGCATGAATTTAAATT	(SEQ ID NO. 5131)
10RD8_HP0927R911	CAUCAUATGCGAGCGGTTGCTCAAAG	(SEQ ID NO. 5132)
10RD9_HP0928R912	CAUCAUATGGAAAAATTTTCAACCAG	(SEQ ID NO. 5133)
10RD10_HP0929R913	CAUCAUAGCATGAGTAGCCCTAATTA	(SEQ ID NO. 5134)
10RD11_HP0930R914	CAUCAUCATGAAAAAGATTTTACTCAC	(SEQ ID NO. 5135)
10RD12_HP0931R915	CAUCAUGGGAATGTTAAAGTGAGTAAA	(SEQ ID NO. 5136)
10RE1_HP0932R916	CAUCAUATAAGCCTTGTTATTTTCTTG	(SEQ ID NO. 5137)
10RE2_HP0933R917	CAUCAUATGTTATTCAGGCGATTGTAT	(SEQ ID NO. 5138)
10RE3_HP0934R918	CAUCAUTAAAAAATGAAACTCCCGGTCG	(SEQ ID NO. 5139)
10RE4_HP0935R919	CAUCAUATGACCATCAAAGTTTTCG	(SEQ ID NO. 5140)
10RE5_HP0936R920	CAUCAUATAGTAGTGAGGCCACTTTGGG	(SEQ ID NO. 5141)
10RE6_HP0937R921	CAUCAUTTGAGCTATTCTGATTATTA	(SEQ ID NO. 5142)
10RE7_HP0938R922	CAUCAUATGGGTGTGTTTGTGATAAG	(SEQ ID NO. 5143)
10RE8_HP0939R923	CAUCAUATGTGAGCCAGCCCTAATCTG	(SEQ ID NO. 5144)
10RE9_HP0940R924	CAUCAUTAAAAATGAAAAAAGTTTATT	(SEQ ID NO. 5145)
10RE10_HP0941R925	CAUCAUAGTAAATGGCATGTTAAAAA	(SEQ ID NO. 5146)
10RE11_HP0942R926	CAUCAUTATGGAAACGATTGATTCGGT	(SEQ ID NO. 5147)
10RE12_HP0943R927	CAUCAUAGCATGAAAAAAGAGGTCGTG	(SEQ ID NO. 5148)
10RF1_HP0944R928	CAUCAUCATGAAAGAGTCAATCCATTC	(SEQ ID NO. 5149)

10RF2_HP0945R929	CAUCAUAGTGGTGATTTGCCAACAAATA	(SEQ ID NO. 5150)
10RF3_HP0946R930	CAUCAUAGTGGGATTTGTCAGCATCAAG	(SEQ ID NO. 5151)
10RF4_HP0947R931	CAUCAUATTTTGTAAAGCGTTTGTAGTG	(SEQ ID NO. 5152)
10RF5_HP0948R932	CAUCAUATGCGTTTTTACATTAATCTTT	(SEQ ID NO. 5153)
10RF6_HP0949R933	CAUCAUATGCGTTGCGTGGTGATTTCT	(SEQ ID NO. 5154)
10RF7_HP0950R934	CAUCAUAACATGGGATTTGCAGATTTC	(SEQ ID NO. 5155)
10RF8_HP0951R935	CAUCAUAGTGATGCAAGGTTTCTTTTA	(SEQ ID NO. 5156)
10RF9_HP0952R936	CAUCAUAATGAAATTTAAATTTTGAA	(SEQ ID NO. 5157)
10RF10_HP0953R937	CAUCAUTTTGTTTAAAGAATGGTTT	(SEQ ID NO. 5158)
10RF11_HP0954R938	CAUCAUAATCAATGAATTTTGGATCA	(SEQ ID NO. 5159)
10RF12_HP0955R939	CAUCAUGATCATGAACGCTTGGAATAC	(SEQ ID NO. 5160)
10RG1_HP0956R940	CAUCAUAACATGGAAAAGCTTATAAAA	(SEQ ID NO. 5161)
10RG2_HP0957R941	CAUCAUTTTGTTTAAAGTTTCTACCTT	(SEQ ID NO. 5162)
10RG3_HP0958R942	CAUCAUGAAAAGCGATGAACACCCACCT	(SEQ ID NO. 5163)
10RG4_HP0959R943	CAUCAUACTGAAAATGGCGTTAGTTAAG	(SEQ ID NO. 5164)
10RG5_HP0960R944	CAUCAUAATGCAAGATTTTCAAGTTTA	(SEQ ID NO. 5165)
10RG6_HP0961R945	CAUCAUAATGGAAAATTCAGTATTGGT	(SEQ ID NO. 5166)
10RG7_HP0962R946	CAUCAUAGGACGATGATTGAAGAAAC	(SEQ ID NO. 5167)
10RG8_HP0963R947	CAUCAUAATGAGCGTTAATTTTAAAG	(SEQ ID NO. 5168)
10RG9_HP0964R948	CAUCAUAAGAGTGTACAAATGCATGGCG	(SEQ ID NO. 5169)
10RG10_HP0965R949	CAUCAUAACAATGAACGAGCAAGAACTC	(SEQ ID NO. 5170)
10RG11_HP0966R950	CAUCAUATAAAGGATTTGATGATGGTTT	(SEQ ID NO. 5171)
10RG12_HP0967R951	CAUCAUAUAACCAATAAAGGAGTTAAAT	(SEQ ID NO. 5172)
10RH1_HP0968R952	CAUCAUAATGCTCGCTTTAGAAATTTAT	(SEQ ID NO. 5173)
10RH2_HP0969R953	CAUCAUAUAATGATGCTCGCTTCCATTAT	(SEQ ID NO. 5174)
10RH3_HP0970R954	CAUCAUGATTAGGAGAAATTGCATTGAA	(SEQ ID NO. 5175)
10RH4_HP0971R955	CAUCAUCACTTTTAAATGAGCATGTTTA	(SEQ ID NO. 5176)
10RH5_HP0972R956	CAUCAUAUTTGATTCAGATGAATTGTTA	(SEQ ID NO. 5177)
10RH6_HP0973R957	CAUCAUAUTTTGAACATTTAACCCACT	(SEQ ID NO. 5178)
10RH7_HP0974R958	CAUCAUAUAATGGCGCAAAAACCTCTTT	(SEQ ID NO. 5179)
10RH8_HP0975R959	CAUCAUAUAAGGAAAAGAAATGCAAATTGA	(SEQ ID NO. 5180)
10RH9_HP0976R960	CAUCAUTAACATGAATTTTCAAGAAAA	(SEQ ID NO. 5181)

10RH10_HP0977R961	CAUCAUGAGTCTTATGATTGAATGGA	(SEQ ID NO. 5182)
10RH11_HP0978R962	CAUCAUAGGGGAAATCATGGAACATAA	(SEQ ID NO. 5183)
10RH12_HP0979R963	CAUCAUTGTGGCTATGGTTCATCAATC	(SEQ ID NO. 5184)
11SA1_HP0980S964	CUACUAGGTTCTTAGCCAAATAGTATCC	(SEQ ID NO. 5185)
11SA2_HP0981S965	CUACUUAATCAGCGATGAAGAGCTTGAC	(SEQ ID NO. 5186)
11SA3_HP0982S966	CUACUUAACCTAATAATTGTAAAGACTAA	(SEQ ID NO. 5187)
11SA4_HP0983S967	CUACUACACACCAATCATTTAGGAGAG	(SEQ ID NO. 5188)
11SA5_HP0984S968	CUACUATCTAAAGCCCATTAATTGATGT	(SEQ ID NO. 5189)
11SA6_HP0985S969	CUACUACUAAACAAGAGCAAGAGAAAC	(SEQ ID NO. 5190)
11SA7_HP0986S970	CUACUATATTATCAACGCCCTAGAGTTATT	(SEQ ID NO. 5191)
11SA8_HP0987S971	CUACUATATACTCATAGGGTTTTTATAGT	(SEQ ID NO. 5192)
11SA9_HP0988S973	CUACUACUACTTCATAGCTCCATAACTAGC	(SEQ ID NO. 5193)
11SA10_HP0990S974	CUACUACUAAACCCTTAATCCCATATACTAA	(SEQ ID NO. 5194)
11SA11_HP0991S975	CUACUACUAGGGTTTAGTGATGAGAGATAG	(SEQ ID NO. 5195)
11SA12_HP0992S976	CUACUACUACTATATTACTTGCGGAAATTC	(SEQ ID NO. 5196)
11SB1_HP0993S977	CUACUACUACTTTTCATTGATAGGGATTGA	(SEQ ID NO. 5197)
11SB2_HP0994S978	CUACUACUATTTATCGTCTACGCTTAGGTG	(SEQ ID NO. 5198)
11SB3_HP0995S979	CUACUACUACACCTTACTTCTTGTCCTCTA	(SEQ ID NO. 5199)
11SB4_HP0996S980	CUACUACUAGCATTATCTATTACGCCCTTT	(SEQ ID NO. 5200)
11SB5_HP0997S981	CUACUACUATTTAATAAACTTTGAGTTAGG	(SEQ ID NO. 5201)
11SB6_HP0999S983	CUACUACUAAACTCACATCCCATGTGATA	(SEQ ID NO. 5202)
11SB7_HP1000S984	CUACUACUACATCATTTTGTGATCCTTAA	(SEQ ID NO. 5203)
11SB8_HP1001S985	CUACUACUATCACAACTTGCTCGCCTTATC	(SEQ ID NO. 5204)
11SB9_HP1002S986	CUACUACUACTTTACTTAGCGTATTTTITA	(SEQ ID NO. 5205)
11SB10_HP1003S987	CUACUACUATTTAAATAATCCATTCCATAGTT	(SEQ ID NO. 5206)
11SB11_HP1004S988	CUACUACUACTATTGAGAAAGTTGCACATC	(SEQ ID NO. 5207)
11SB12_HP1005S989	CUACUACUAAAGTTCTGACTTTAAGCATAT	(SEQ ID NO. 5208)
11SC1_HP1006S990	CUACUACUATAATCCATCAAAACACTTCTT	(SEQ ID NO. 5209)
11SC2_HP1008S991	CUACUACUAGCTAATTTAATGCGGTGTTTC	(SEQ ID NO. 5210)
11SC3_HP1009S992	CUACUACUAGCGCTAGTGGGATAAAAGATT	(SEQ ID NO. 5211)
11SC4_HP1010S993	CUACUACUATTTGAACGATAACCCCTTAA	(SEQ ID NO. 5212)
11SC5_HP1011S994	CUACUACUATGTTTTCATCTTAAATCCGCTC	(SEQ ID NO. 5213)

11SC6_HP1012S995	CUACUACUAAGGCTCTTTTAAGGTTTCAAA	(SEQ ID NO. 5214)
11SC7_HP1013S996	CUACUACUATCATGCAATTACCTCATATTG	(SEQ ID NO. 5215)
11SC8_HP1014S997	CUACUACUAAAAGAAATATCTTTATTTAAAA	(SEQ ID NO. 5216)
11SC9_HP1015S998	CUACUACUATCATGCTTTTCAAAAAGACTTG	(SEQ ID NO. 5217)
11SC10_HP1016S999	CUACUACUATTAAAGATTATAATATTAAAT	(SEQ ID NO. 5218)
11SC11_HP1017S1000	CUACUACUAGAAAAGATTATATCAAAATCTT	(SEQ ID NO. 5219)
11SC12_HP1018S1001	CUACUACUATTAAATAGAAATCGTGTAAAGAA	(SEQ ID NO. 5220)
11SD1_HP1019S1002	CUACUACUACGACCCACCCCTATCATTTCA	(SEQ ID NO. 5221)
11SD2_HP1020S1003	CUACUACUACCTTTTATCATCATTTAAAGTT	(SEQ ID NO. 5222)
11SD3_HP1021S1004	CUACUACUAGTTATTTGCGCGGTAAGTTAT	(SEQ ID NO. 5223)
11SD4_HP1022S1005	CUACUACUATTGTTTTAAGAAATCTCTTTA	(SEQ ID NO. 5224)
11SD5_HP1023S1006	CUACUACUATTAAACAAAACCTTCCCAA	(SEQ ID NO. 5225)
11SD6_HP1024S1007	CUACUACUATCCTTACAATCTTTTCTAA	(SEQ ID NO. 5226)
11SD7_HP1025S1008	CUACUACUAGCTCATTTTTFAAATAAAATC	(SEQ ID NO. 5227)
11SD8_HP1026S1009	CUACUACUAAAGATCAATTTCTTATCTTATC	(SEQ ID NO. 5228)
11SD9_HP1027S1010	CUACUACUAAATCTTTTAAACATTCACCTCT	(SEQ ID NO. 5229)
11SD10_HP1028S1011	CUACUACUAGCTTAGATAGGGCTATCTTTA	(SEQ ID NO. 5230)
11SD11_HP1029S1012	CUACUACUACCAATCTCATAAATTTTAATTT	(SEQ ID NO. 5231)
11SD12_HP1030S1013	CUACUACUAAAGATTTAATGTTTCAATTGTT	(SEQ ID NO. 5232)
11SE1_HP1031S1014	CUACUACUATCTCACTCTTCTTCTATTTTC	(SEQ ID NO. 5233)
11SE2_HP1032S1015	CUACUACUATCAGCCATGATCCACTCCTAA	(SEQ ID NO. 5234)
11SE3_HP1033S1016	CUACUACUAAATCAGATAGCGGCTTTTGG	(SEQ ID NO. 5235)
11SE4_HP1034S1017	CUACUACUATTCAGCCTACCCCAATACT	(SEQ ID NO. 5236)
11SE5_HP1035S1018	CUACUACUAAATGTTTCATGCTTGTTCCTTA	(SEQ ID NO. 5237)
11SE6_HP1036S1019	CUACUACUAAATTTCACTCACTCCCTTTT	(SEQ ID NO. 5238)
11SE7_HP1037S1020	CUACUACUACATCACAAAAGCTCAGACCTA	(SEQ ID NO. 5239)
11SE8_HP1038S1021	CUACUACUACCTTTTATTTTGTGATTGTTA	(SEQ ID NO. 5240)
11SE9_HP1039S1022	CUACUACUATGCTAAAAGCACTTTTATCT	(SEQ ID NO. 5241)
11SE10_HP1040S1023	CUACUACUATTATCTGTCTTTTAAATGCCTAA	(SEQ ID NO. 5242)
11SE11_HP1041S1024	CUACUACUATTCTCCTTTTATCAATTAT	(SEQ ID NO. 5243)
11SE12_HP1042S1025	CUACUACUATTAGTTTAAAGCGTTGTTGAA	(SEQ ID NO. 5244)
11SF1_HP1043S1026	CUACUACUACCGGAATTTACTCTTCACA	(SEQ ID NO. 5245)

11SF2_HP1044S1027	CUACUACUATTAAGCTTGATTTTGTAG	(SEQ ID NO. 5246)
11SF3_HP1045S1028	CUACUACUATTTTAGATTTTACTCCTCCAT	(SEQ ID NO. 5247)
11SF4_HP1046S1029	CUACUACUATTCGCATTATTTCACCATTC	(SEQ ID NO. 5248)
11SF5_HP1047S1030	CUACUACUACTTCTTATTTTTTAGTCATTA	(SEQ ID NO. 5249)
11SF6_HP1048S1031	CUACUACUAGTTCATTAGAGAGTTCCTTTT	(SEQ ID NO. 5250)
11SF7_HP1049S1032	CUACUACUATCATGCTATGCTTCTCTCCTT	(SEQ ID NO. 5251)
11SF8_HP1050S1033	CUACUACUATTTTAATTTTCAGTCTTCTCTCA	(SEQ ID NO. 5252)
11SF9_HP1051S1034	CUACUACUACTAAATAGGAGGCAAAATGTA	(SEQ ID NO. 5253)
11SF10_HP1052S1035	CUACUACUATTCAGGATTAAGCGAAAGCCA	(SEQ ID NO. 5254)
11SF11_HP1053S1036	CUACUACUATCATAATACTTCTTTATGTC	(SEQ ID NO. 5255)
11SF12_HP1054S1037	CUACUACUATTAACATGACTATCCTTTTCAT	(SEQ ID NO. 5256)
11SG1_HP1055S1038	CUACUACUATTAATAATAAACGCATAATT	(SEQ ID NO. 5257)
11SG2_HP1056S1039	CUACUACUACCTTTACATAATAATAGTTGTA	(SEQ ID NO. 5258)
11SG3_HP1057S1040	CUACUACUATTAATTTTTTAGAACACATAT	(SEQ ID NO. 5259)
11SG4_HP1058S1041	CUACUACUACATTAATGATAACTTTCTAAT	(SEQ ID NO. 5260)
11SG5_HP1059S1042	CUACUACUATTTCTAAACAAGATTAAATA	(SEQ ID NO. 5261)
11SG6_HP1060S1043	CUACUACUATCTTCAACAATCTCTTTTTC	(SEQ ID NO. 5262)
11SG7_HP1061S1044	CUACUACUATCTAAATCAAAATCTTTCAAC	(SEQ ID NO. 5263)
11SG8_HP1062S1045	CUACUACUAGTTCATAAAATCAGCATCCCA	(SEQ ID NO. 5264)
11SG9_HP1063S1046	CUACUACUACTTAACATAAACTTCTCTTTG	(SEQ ID NO. 5265)
11SG10_HP1064S1047	CUACUACUAGCATATTTACCTCTTATCCTT	(SEQ ID NO. 5266)
11SG11_HP1065S1048	CUACUACUATTAATTTAAAGAGTGAATC	(SEQ ID NO. 5267)
11SG12_HP1066S1049	CUACUACUACTCTCTCCGCCATTAAATAAT	(SEQ ID NO. 5268)
11SH1_HP1067S1050	CUACUACUATACATTTGGCTTTAACACTCAA	(SEQ ID NO. 5269)
11SH2_HP1068S1051	CUACUACUATCCTTAATTTATTTGGTTGTTT	(SEQ ID NO. 5270)
11SH3_HP1069S1052	CUACUACUACTCTTAACCTCGCTTGCTCTTC	(SEQ ID NO. 5271)
11SH4_HP1070S1053	CUACUACUAGGTAAATAGGCATTAGAGACT	(SEQ ID NO. 5272)
11SH5_HP1071S1054	CUACUACUATCATGCGCTTTTATTTTATT	(SEQ ID NO. 5273)
11SH6_HP1072S1055	CUACUACUATTTTCATTCAATGATCCTTAAT	(SEQ ID NO. 5274)
11SH7_HP1073S1056	CUACUACUATTAATCTTCTATATCACACCTT	(SEQ ID NO. 5275)
11SH8_HP1074S1057	CUACUACUATTTTTCGCTTTAAACGAATAG	(SEQ ID NO. 5276)
11SH9_HP1075S1058	CUACUACUACCTACACAAATTTCACTAAGA	(SEQ ID NO. 5277)

11SH10_HP1076S1059	CUACUACUAATTCTAAGCCCTCAAATTATC	(SEQ ID NO. 5278)
11SH11_HP1077S1060	CUACUACUATAGAAATTCAGCTCTCTAGTTT	(SEQ ID NO. 5279)
11SH12_HP1078S1061	CUACUACUATTAGAAAATTTTAGGATTTGT	(SEQ ID NO. 5280)
11RA1_HP0980R964	CAUCAUCAUGTGGAGCATGATGTTCACTGT	(SEQ ID NO. 5281)
11RA2_HP0981R965	CAUCAUCAUAAAGAAGAAAATGAAGAAAAT	(SEQ ID NO. 5282)
11RA3_HP0982R966	CAUCAUCAUCTTGCTACCCCAAATTCAGG	(SEQ ID NO. 5283)
11RA4_HP0983R967	CAUCAUCAUAAAGGAAAATTTATGGATG	(SEQ ID NO. 5284)
11RA5_HP0984R968	CAUCAUCAUATGGAATAATAACGATAAA	(SEQ ID NO. 5285)
11RA6_HP0985R969	CAUCAUCAUATGGGCGTTGGTTCCTTGA	(SEQ ID NO. 5286)
11RA7_HP0986R970	CAUCAUCAUCCCATTAAGATGTGGAACT	(SEQ ID NO. 5287)
11RA8_HP0987R971	CAUCAUCAUATGCTAGATAGGGCTATATTA	(SEQ ID NO. 5288)
11RA9_HP0989R973	CAUCAUCAUTTATTTTGTGCTTAACGCTATC	(SEQ ID NO. 5289)
11RA10_HP0990R974	CAUCAUCAUAGAAATGTTGTGTAATAATGGT	(SEQ ID NO. 5290)
11RA11_HP0991R975	CAUCAUCAUAAATTTATGGCTTTTGAAATGA	(SEQ ID NO. 5291)
11RA12_HP0992R976	CAUCAUCAUAAATAGAAAATGATTAATA	(SEQ ID NO. 5292)
11RB1_HP0993R977	CAUCAUCAUATGTCATTTTGCCCTATGTTA	(SEQ ID NO. 5293)
11RB2_HP0994R978	CAUCAUCAUATGTCCTTTCTATCAATCCCT	(SEQ ID NO. 5294)
11RB3_HP0995R979	CAUCAUCAUGGAGCAATATGCCACATAACA	(SEQ ID NO. 5295)
11RB4_HP0996R980	CAUCAUCAUAAATGAAACGCTCCCACTAGA	(SEQ ID NO. 5296)
11RB5_HP0997R981	CAUCAUCAUTTATTTTGTGCTTAACGCTATC	(SEQ ID NO. 5297)
11RB6_HP0999R983	CAUCAUCAUAAATGAGCAAAGACAGAGATT	(SEQ ID NO. 5298)
11RB7_HP1000R984	CAUCAUCAUGGAATAAGCGATGATAATCAC	(SEQ ID NO. 5299)
11RB8_HP1001R985	CAUCAUCAUATGGAATTTAAACACCAA	(SEQ ID NO. 5300)
11RB9_HP1002R986	CAUCAUCAUTAAATGAAGAAAACAAGACTT	(SEQ ID NO. 5301)
11RB10_HP1003R987	CAUCAUCAUGTTTGTGGTAGTGCAACTTCT	(SEQ ID NO. 5302)
11RB11_HP1004R988	CAUCAUCAUAAATGGCGTTAGAAAAAAGTT	(SEQ ID NO. 5303)
11RB12_HP1005R989	CAUCAUCAUTATGTCAAATATTTATACAGA	(SEQ ID NO. 5304)
11RC1_HP1006R990	CAUCAUCAUGTGGTTTCACTGAAAAGAGAGT	(SEQ ID NO. 5305)
11RC2_HP1008R991	CAUCAUCAUCTATGAAAAAAATTTGATGATA	(SEQ ID NO. 5306)
11RC3_HP1009R992	CAUCAUCAUGTGATTTGTTTTTATTCTTTG	(SEQ ID NO. 5307)
11RC4_HP1010R993	CAUCAUCAUATTGAATCGTTTCTTTAACCG	(SEQ ID NO. 5308)
11RC5_HP1011R994	CAUCAUCAUATGCTTTTATTTCATTAGTAAA	(SEQ ID NO. 5309)

11RC6_HP1012R995	CAUCAUCGCGGATTTAAGATGAAACATT	(SEQ ID NO. 5310)
11RC7_HP1013R996	CAUCAUCAUAGCCTTATAACATGCAATTTC	(SEQ ID NO. 5311)
11RC8_HP1014R997	CAUCAUCAUATTGCATGAATGGTTCCAATC	(SEQ ID NO. 5312)
11RC9_HP1015R998	CAUCAUCAUCTGTTAGTGCTTTTATTGTT	(SEQ ID NO. 5313)
11RC10_HP1016R999	CAUCAUCAUCTGTGGTTTAAATGTGTGG	(SEQ ID NO. 5314)
11RC11_HP1017R1000	CAUCAUCAUAAATGCTTTTGATCGTTTTT	(SEQ ID NO. 5315)
11RC12_HP1018R1001	CAUCAUCAUCATGATGAAAAAACCCCTTT	(SEQ ID NO. 5316)
11RD1_HP1019R1002	CAUCAUCAUAGAGCGAGTGAGTGTCCTC	(SEQ ID NO. 5317)
11RD2_HP1020R1003	CAUCAUCAUATGTCTTTTGATTAGAGTGAAT	(SEQ ID NO. 5318)
11RD3_HP1021R1004	CAUCAUCAUAAAAGGAAGAAATTGATGAAAA	(SEQ ID NO. 5319)
11RD4_HP1022R1005	CAUCAUCAUGATTTCATGCATTCAGAACTC	(SEQ ID NO. 5320)
11RD5_HP1023R1006	CAUCAUCAUTTTAATGCAATATAAGAAAAA	(SEQ ID NO. 5321)
11RD6_HP1024R1007	CAUCAUCAUTCCATGAGTAAGAGTTTATAC	(SEQ ID NO. 5322)
11RD7_HP1025R1008	CAUCAUCAUGTGTGCGATTATGATGAACCG	(SEQ ID NO. 5323)
11RD8_HP1026R1009	CAUCAUCAUAAAAAATGAGCCTGACTTCGC	(SEQ ID NO. 5324)
11RD9_HP1027R1010	CAUCAUCAUTATCAGCATGAAAAGATTAGA	(SEQ ID NO. 5325)
11RD10_HP1028R1011	CAUCAUCAUTATGAGATTGGTGAGTCTTGT	(SEQ ID NO. 5326)
11RD11_HP1029R1012	CAUCAUCAUATGGCTATTTTGGGGAATTA	(SEQ ID NO. 5327)
11RD12_HP1030R1013	CAUCAUCAUAGTGAGAAAATGCAAGATTTTA	(SEQ ID NO. 5328)
11RE1_HP1031R1014	CAUCAUCAUAGTGGATCATGGCTGATATT	(SEQ ID NO. 5329)
11RE2_HP1032R1015	CAUCAUCAUTTATGATTTTGTGATGAGAAA	(SEQ ID NO. 5330)
11RE3_HP1033R1016	CAUCAUCAUACTTCTAATGTATCTCTAAAT	(SEQ ID NO. 5331)
11RE4_HP1034R1017	CAUCAUCAUAAATAAGGAACAAGCATGAACA	(SEQ ID NO. 5332)
11RE5_HP1035R1018	CAUCAUCAUGGGAGTGGTGAAATTCTATA	(SEQ ID NO. 5333)
11RE6_HP1036R1019	CAUCAUCAUGTGATGCGAGAGATCCTTACT	(SEQ ID NO. 5334)
11RE7_HP1037R1020	CAUCAUCAUCCCATGAAAGGATTAGAAAGA	(SEQ ID NO. 5335)
11RE8_HP1038R1021	CAUCAUCAUATGAAAAATTTTAGTGATTCAA	(SEQ ID NO. 5336)
11RE9_HP1039R1022	CAUCAUCAUGGTGTGGCGAGTTTGTGTGA	(SEQ ID NO. 5337)
11RE10_HP1040R1023	CAUCAUCAUATGGCTTTGAAATCTGGAGAAA	(SEQ ID NO. 5338)
11RE11_HP1041R1024	CAUCAUCAUATTTTAGATTATGGCAAAACGA	(SEQ ID NO. 5339)
11RE12_HP1042R1025	CAUCAUCAUATGATGCAAGTTTACCACCTT	(SEQ ID NO. 5340)
11RF1_HP1043R1026	CAUCAUCAUACCATGCGGCTTCTACTGATT	(SEQ ID NO. 5341)

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11RF2_HP1044R1027	CAUCAUAAGGGTGATATGCTGATCTCC	(SEQ ID NO. 5342)
11RF3_HP1045R1028	CAUCAUGGAGATGCGATGCAATTAGAC	(SEQ ID NO. 5343)
11RF4_HP1046R1029	CAUCAUAATGACTAAAAAATAGAAGAG	(SEQ ID NO. 5344)
11RF5_HP1047R1030	CAUCAUCACTAATGAACGCTCATAAAGAA	(SEQ ID NO. 5345)
11RF6_HP1048R1031	CAUCAUGAAGCATAGCATGAGTGGTAT	(SEQ ID NO. 5346)
11RF7_HP1049R1032	CAUCAUGATAATGATGGGTTCTTATT	(SEQ ID NO. 5347)
11RF8_HP1050R1033	CAUCAUATTGGTAGTGAGTGTTCCTGCA	(SEQ ID NO. 5348)
11RF9_HP1051R1034	CAUCAUGGTGTATCAAAACAATTTT	(SEQ ID NO. 5349)
11RF10_HP1052R1035	CAUCAUATTATGAACAACAACCATTA	(SEQ ID NO. 5350)
11RF11_HP1053R1036	CAUCAUCACTTAATGAGCAATGATATAAA	(SEQ ID NO. 5351)
11RF12_HP1054R1037	CAUCAUATATTGATTTTAAACGCTTA	(SEQ ID NO. 5352)
11RG1_HP1055R1038	CAUCAUAATGTTGAAATTTAAATATGG	(SEQ ID NO. 5353)
11RG2_HP1056R1039	CAUCAUATTGGGTATCAATATGTGTCT	(SEQ ID NO. 5354)
11RG3_HP1057R1040	CAUCAUCUGGATTTTGGGTCTTAAAAAAT	(SEQ ID NO. 5355)
11RG4_HP1058R1041	CAUCAUCACTTAGGATTTTAAATGAGC	(SEQ ID NO. 5356)
11RG5_HP1059R1042	CAUCAUATGAAGAAGCGGATAGTCAAT	(SEQ ID NO. 5357)
11RG6_HP1060R1043	CAUCAUATTATGTTTGGCATGGGCTTTT	(SEQ ID NO. 5358)
11RG7_HP1061R1044	CAUCAUAGAGAATGTTTGAAGATTTAA	(SEQ ID NO. 5359)
11RG8_HP1062R1045	CAUCAUGTTGAAGAATTTGATTTAGA	(SEQ ID NO. 5360)
11RG9_HP1063R1046	CAUCAUACTGATTTTATGAACCCCTTAT	(SEQ ID NO. 5361)
11RG10_HP1064R1047	CAUCAUACTGAATGCTTTATGCAATCAA	(SEQ ID NO. 5362)
11RG11_HP1065R1048	CAUCAUATGAAGGATAAGAGGTAATAT	(SEQ ID NO. 5363)
11RG12_HP1066R1049	CAUCAUGTGCATTATTTAAGAATTTTA	(SEQ ID NO. 5364)
11RH1_HP1067R1050	CAUCAUATTGAAACTACTGGTAGTAGAT	(SEQ ID NO. 5365)
11RH2_HP1068R1051	CAUCAUGTGTAAAGCCCAATGTATTAT	(SEQ ID NO. 5366)
11RH3_HP1069R1052	CAUCAUATAATGAACCAACGAACGAAC	(SEQ ID NO. 5367)
11RH4_HP1070R1053	CAUCAUGAGTGCTAGCTTACAAACAGA	(SEQ ID NO. 5368)
11RH5_HP1071R1054	CAUCAUATGCCTATTAAACCCTCTCTAT	(SEQ ID NO. 5369)
11RH6_HP1072R1055	CAUCAUCGCATGAAAGAAATCTTTTAC	(SEQ ID NO. 5370)
11RH7_HP1073R1056	CAUCAUATGAAAGCAACTTTTCAAGTG	(SEQ ID NO. 5371)
11RH8_HP1074R1057	CAUCAUATAAGCATGGGCATCAAGAA	(SEQ ID NO. 5372)
11RH9_HP1075R1058	CAUCAUAGAGAGATGGGATGAAAAAAA	(SEQ ID NO. 5373)

11RH10_HP1076R1059	CAUCAUAUUTTTATGGATATTTTAAAAACT	(SEQ ID NO. 5374)
11RH11_HP1077R1060	CAUCAUAUTGTGAAATTGTGGTTTCCTTA	(SEQ ID NO. 5375)
11RH12_HP1078R1061	CAUCAUAUATGGCAGATAAAGAAATACTG	(SEQ ID NO. 5376)
12SA1_HP1079S1062	CUACUAUATGCTTTTAAACCAAAAAGATTCT	(SEQ ID NO. 5377)
12SA2_HP1080S1063	CUACUAUAGGTTTCATCTCTTTTCGTTCAA	(SEQ ID NO. 5378)
12SA3_HP1081S1064	CUACUAUACCTTAAAGCCACTCTGCAATTT	(SEQ ID NO. 5379)
12SA4_HP1082S1065	CUACUAUATAAAACCCCTTAGCATTTCTGTC	(SEQ ID NO. 5380)
12SA5_HP1083S1066	CUACUAUAGTTAGAAATTTAGCGCTAAGAG	(SEQ ID NO. 5381)
12SA6_HP1084S1067	CUACUAUACAATCAATCTAATAGCAAAA	(SEQ ID NO. 5382)
12SA7_HP1085S1068	CUACUAUACGCATTAATAATTGAGGTAGGG	(SEQ ID NO. 5383)
12SA8_HP1086S1069	CUACUAUATAGGCTCGCTTGAATGGAT	(SEQ ID NO. 5384)
12SA9_HP1087S1070	CUACUAUAAGTCATTTTAAACACAAATTAT	(SEQ ID NO. 5385)
12SA10_HP1088S1071	CUACUAUATCATCGCTTGAGTAATCTTTT	(SEQ ID NO. 5386)
12SA11_HP1089S1072	CUACUAUATCATCGGTTGCACATGTCCTTT	(SEQ ID NO. 5387)
12SA12_HP1090S1073	CUACUAUAAGCCTAAAAGTTTGGCAAAAT	(SEQ ID NO. 5388)
12SB1_HP1091S1074	CUACUAUATCATTCCTCAATAGGTTT	(SEQ ID NO. 5389)
12SB2_HP1092S1075	CUACUAUATTAAGCTTTTGCAGCGAGTTT	(SEQ ID NO. 5390)
12SB3_HP1093S1076	CUACUAUATTAAGCTCGTTTGTGGTAGGA	(SEQ ID NO. 5391)
12SB4_HP1094S1077	CUACUAUAGAGCTATGAAGCAAGAAAAG	(SEQ ID NO. 5392)
12SB5_HP1095S1078	CUACUAUACCGCTAAAGCGATTGGCCTTT	(SEQ ID NO. 5393)
12SB6_HP1096S1079	CUACUAUAATTAACCTTGATTTTCTATAT	(SEQ ID NO. 5394)
12SB7_HP1097S1080	CUACUAUATCATTATCTTAAGGGGATAGG	(SEQ ID NO. 5395)
12SB8_HP1098S1081	CUACUAUACTAAACTTTGATCTTAAAGCTG	(SEQ ID NO. 5396)
12SB9_HP1099S1082	CUACUAUATGCCATGATCTTTTGTGTTATC	(SEQ ID NO. 5397)
12SB10_HP1100S1083	CUACUAUAATTTATACCTTTTATACCAAAAC	(SEQ ID NO. 5398)
12SB11_HP1101S1084	CUACUAUACCCCTTTTATTGATAGAGTGTT	(SEQ ID NO. 5399)
12SB12_HP1102S1085	CUACUAUATCTTGGGTAAGTTTCAGTTT	(SEQ ID NO. 5400)
12SC1_HP1103S1086	CUACUAUACTATATCTTATCATGCAGTAA	(SEQ ID NO. 5401)
12SC2_HP1104S1087	CUACUAUAATTAATCAACGATTTTTCAT	(SEQ ID NO. 5402)
12SC3_HP1105S1088	CUACUAUAATTTGGCTCTAGCTCTTTT	(SEQ ID NO. 5403)
12SC4_HP1106S1089	CUACUAUAGGTTATTTAGAGGTTTAGAT	(SEQ ID NO. 5404)
12SC5_HP1107S1090	CUACUAUAAAACCTCTAAATAACCATATC	(SEQ ID NO. 5405)

12SC6_HP1108S1091	CUACUACUAGTTATTGAACCTTCTTCATAAG	(SEQ ID NO. 5406)
12SC7_HP1109S1092	CUACUACUATTATGATTTTCTTTCTCTTG	(SEQ ID NO. 5407)
12SC8_HP1110S1093	CUACUACUACCTTTTAAATAAGCTCAT	(SEQ ID NO. 5408)
12SC9_HP1111S1094	CUACUACUATTATCTTTAGCTTCTCTCT	(SEQ ID NO. 5409)
12SC10_HP1112S1095	CUACUACUATTATCAAAACACCTTTTAAA	(SEQ ID NO. 5410)
12SC11_HP1113S1096	CUACUACUAGCTTAAATAATAAGTGTAG	(SEQ ID NO. 5411)
12SC12_HP1114S1097	CUACUACUACGTTTAAAGCGTTCTTAATTG	(SEQ ID NO. 5412)
12SD1_HP1115S1098	CUACUACUATCAATGTTTGTGATAATGATTG	(SEQ ID NO. 5413)
12SD2_HP1116S1099	CUACUACUATTAAATTTTGTGTAGGATT	(SEQ ID NO. 5414)
12SD3_HP1117S1100	CUACUACUAGTTATCGGCTTGAAGTGTTC	(SEQ ID NO. 5415)
12SD4_HP1118S1101	CUACUACUACAAGAATTAAATCTTTC	(SEQ ID NO. 5416)
12SD5_HP1119S1102	CUACUACUATGGGTAGAAACTTATGTTT	(SEQ ID NO. 5417)
12SD6_HP1120S1103	CUACUACUATTACGCCCTGCACCTTTAAAAA	(SEQ ID NO. 5418)
12SD7_HP1121S1104	CUACUACUAAATAAATCGCCTTTAACATTT	(SEQ ID NO. 5419)
12SD8_HP1122S1105	CUACUACUACTAGCTTATCCCAATAAATC	(SEQ ID NO. 5420)
12SD9_HP1123S1106	CUACUACUACTTACTACCCATGCGAACATG	(SEQ ID NO. 5421)
12SD10_HP1124S1107	CUACUACUATCATGGTTTTCATGGTGGTG	(SEQ ID NO. 5422)
12SD11_HP1125S1108	CUACUACUAAATCTTCAATTAATTGACAT	(SEQ ID NO. 5423)
12SD12_HP1126S1109	CUACUACUATTACCAATCAAGGCTTGAT	(SEQ ID NO. 5424)
12SE1_HP1127S1110	CUACUACUACCTCATTTGTTCTTCCCTTAGTG	(SEQ ID NO. 5425)
12SE2_HP1128S1111	CUACUACUACCTTATCAGTTGGCATTTTT	(SEQ ID NO. 5426)
12SE3_HP1129S1112	CUACUACUACCCCTGCTTTTAAAGGACTTGT	(SEQ ID NO. 5427)
12SE4_HP1130S1113	CUACUACUACTTTTATTTTGTAGAGACAAA	(SEQ ID NO. 5428)
12SE5_HP1131S1114	CUACUACUACCCCTTAAAGAGACTCAATCT	(SEQ ID NO. 5429)
12SE6_HP1132S1115	CUACUACUACCCCTTAGGAATTTTTCATGTT	(SEQ ID NO. 5430)
12SE7_HP1133S1116	CUACUACUATTTTATTTTAGGGCTTCTACG	(SEQ ID NO. 5431)
12SE8_HP1134S1117	CUACUACUACTCTACTCGCTATAAGTGAG	(SEQ ID NO. 5432)
12SE9_HP1135S1118	CUACUACUATGATTAAATAGATTGAATAAC	(SEQ ID NO. 5433)
12SE10_HP1136S1119	CUACUACUATGCATTTAAAGCCTTTGTTTC	(SEQ ID NO. 5434)
12SE11_HP1137S1120	CUACUACUACATTCATCAACTCCCTAAACC	(SEQ ID NO. 5435)
12SE12_HP1138S1121	CUACUACUAAAGCGTTAAGACATCATTTTT	(SEQ ID NO. 5436)
12SF1_HP1139S1122	CUACUACUACCATCACTACCCCTGAAGAAT	(SEQ ID NO. 5437)

12SF2_HP1140S1123	CUACUACUAACTCACATCCTATCATATAATC	(SEQ ID NO. 5438)
12SF3_HP1141S1124	CUACUACUATTGTCTCATGCCAAAATACCG	(SEQ ID NO. 5439)
12SF4_HP1142S1125	CUACUACUATTACTTCTCATTCATCATCAT	(SEQ ID NO. 5440)
12SF5_HP1143S1126	CUACUACUACTAATCTTCTAAATCCTCCCC	(SEQ ID NO. 5441)
12SF6_HP1144S1127	CUACUACUACTAGGCGCATGCCGAATAATG	(SEQ ID NO. 5442)
12SF7_HP1145S1128	CUACUACUATGTGGGATCGTGTAGTTCT	(SEQ ID NO. 5443)
12SF8_HP1146S1129	CUACUACUACGGCTTCTAGATCAAGACTTC	(SEQ ID NO. 5444)
12SF9_HP1147S1130	CUACUACUACAGAGATTAAATGGCGGACTTC	(SEQ ID NO. 5445)
12SF10_HP1148S1131	CUACUACUATCATGATTGTGTGCTGTTGAA	(SEQ ID NO. 5446)
12SF11_HP1149S1132	CUACUACUATTTCACTCAACTATTCTCTAA	(SEQ ID NO. 5447)
12SF12_HP1150S1133	CUACUACUAGCCCACTAAAGCATAGAAAC	(SEQ ID NO. 5448)
12SG1_HP1151S1134	CUACUACUACCTTAGGCTTTTGTGAGAAAGT	(SEQ ID NO. 5449)
12SG2_HP1152S1135	CUACUACUAAAAGTTAGCGCATTTTAGGG	(SEQ ID NO. 5450)
12SG3_HP1153S1136	CUACUACUACTATCCTTTTATATATGTTGT	(SEQ ID NO. 5451)
12SG4_HP1154S1137	CUACUACUATTAAGCTCGTTCTCTTCTTTT	(SEQ ID NO. 5452)
12SG5_HP1155S1138	CUACUACUAAATTTTAGGCGCTCAAAATCGT	(SEQ ID NO. 5453)
12SG6_HP1156S1139	CUACUACUAGTTTAATCAAAAGCCTATGTT	(SEQ ID NO. 5454)
12SG7_HP1157S1140	CUACUACUATTAAACCCCATGATGTAATT	(SEQ ID NO. 5455)
12SG8_HP1158S1141	CUACUACUATTTTAGAGGCGCATTTTTTT	(SEQ ID NO. 5456)
12SG9_HP1159S1142	CUACUACUAAAATTTTCAAGCCCTTCATA	(SEQ ID NO. 5457)
12SG10_HP1160S1143	CUACUACUACCTAATCCTGTGTGCGTTCAA	(SEQ ID NO. 5458)
12SG11_HP1161S1144	CUACUACUATAAAAATTAAAGCGAAAGAAC	(SEQ ID NO. 5459)
12SG12_HP1162S1145	CUACUACUACATCTTGCTTAAAAACCCATT	(SEQ ID NO. 5460)
12SH1_HP1163S1146	CUACUACUATTAATTCTTTTGGCGTTTTC	(SEQ ID NO. 5461)
12SH2_HP1164S1147	CUACUACUAGAGTGAGCGGCTTAAAGAGTG	(SEQ ID NO. 5462)
12SH3_HP1165S1148	CUACUACUAGCCGCTCACTCATCAAAACGGC	(SEQ ID NO. 5463)
12SH4_HP1166S1149	CUACUACUACTATTGTTGTAAATTTTATA	(SEQ ID NO. 5464)
12SH5_HP1167S1150	CUACUACUACATCAAAAAGATGCTACTAGA	(SEQ ID NO. 5465)
12SH6_HP1168S1151	CUACUACUATTCAAGAGGCTTTGATGTAGG	(SEQ ID NO. 5466)
12SH7_HP1169S1152	CUACUACUACCATTTTAAAGCCACTTTCTTT	(SEQ ID NO. 5467)
12SH8_HP1170S1153	CUACUACUATTTTACCCTCTAATGTGTGG	(SEQ ID NO. 5468)
12SH9_HP1171S1154	CUACUACUATATTTAAACAGCTCCCTAAAAA	(SEQ ID NO. 5469)

12SH10_HP1172S1155	CUACUACUATCATTCAAAAATAATTTCTTC	(SEQ ID NO. 5470)
12SH11_HP1173S1156	CUACUACUAAATGAAGCGAAGATAAAGAC	(SEQ ID NO. 5471)
12SH12_HP1174S1157	CUACUACUATTTAGGAGTTTCTTCTTGCT	(SEQ ID NO. 5472)
12RA1_HP1079R1062	CAUCAUCAUGGATTTAATGATTCAGTCTGT	(SEQ ID NO. 5473)
12RA2_HP1080R1063	CAUCAUCAUATGAAAAAGATTGCATTTTT	(SEQ ID NO. 5474)
12RA3_HP1081R1064	CAUCAUCAUCGTTTGACAGAAATGCTAAGGG	(SEQ ID NO. 5475)
12RA4_HP1082R1065	CAUCAUCAUAGGTTAAGCATTTGAAACTCT	(SEQ ID NO. 5476)
12RA5_HP1083R1066	CAUCAUCAUAAAAGGAAAAAAATGAAAAAT	(SEQ ID NO. 5477)
12RA6_HP1084R1067	CAUCAUCAUATGCCAAAAAAATGCCGACAC	(SEQ ID NO. 5478)
12RA7_HP1085R1068	CAUCAUCAUGGAATGGGCTTGAAAAATCTC	(SEQ ID NO. 5479)
12RA8_HP1086R1069	CAUCAUCAUTTTAATGCGCTTAGATTACGC	(SEQ ID NO. 5480)
12RA9_HP1087R1070	CAUCAUCAUGGGAATGTTGAATTTTTTATC	(SEQ ID NO. 5481)
12RA10_HP1088R1071	CAUCAUCAUGGAAAAAATTTGATGCGATTGA	(SEQ ID NO. 5482)
12RA11_HP1089R1072	CAUCAUCAUAACGCATGAACCTTAGAAAAAC	(SEQ ID NO. 5483)
12RA12_HP1090R1073	CAUCAUCAUGTGCAACCGATGAAATCTAAA	(SEQ ID NO. 5484)
12RB1_HP1091R1074	CAUCAUCAUAAGGATAGCCATGAACCCCC	(SEQ ID NO. 5485)
12RB2_HP1092R1075	CAUCAUCAUCATGCAAAAATGGGTATTATGC	(SEQ ID NO. 5486)
12RB3_HP1093R1076	CAUCAUCAUATGGAAACACTCTTTAATCATT	(SEQ ID NO. 5487)
12RB4_HP1094R1077	CAUCAUCAUGGTGTGTGAGCGGAAAACTTTT	(SEQ ID NO. 5488)
12RB5_HP1095R1078	CAUCAUCAUTTTGCTTAAACGCTATCAAGTT	(SEQ ID NO. 5489)
12RB6_HP1096R1079	CAUCAUCAUGGATAGAGGAATGAGGAAAAA	(SEQ ID NO. 5490)
12RB7_HP1097R1080	CAUCAUCAUTTGATCAAAATGGCTTTAAAAA	(SEQ ID NO. 5491)
12RB8_HP1098R1081	CAUCAUCAUATGTTAGAAAAATGTCAAAAAG	(SEQ ID NO. 5492)
12RB9_HP1099R1082	CAUCAUCAUAAATGCAAGATAAAATAATAG	(SEQ ID NO. 5493)
12RB10_HP1100R1083	CAUCAUCAUTTCATGCGCTAAGCATTCCTTA	(SEQ ID NO. 5494)
12RB11_HP1101R1084	CAUCAUCAUTTGATGTTAGATTTTGATTGG	(SEQ ID NO. 5495)
12RB12_HP1102R1085	CAUCAUCAUCATGGGTTATCAATTGTTTGA	(SEQ ID NO. 5496)
12RC1_HP1103R1086	CAUCAUCAUTATGCCAAAAACTGAAACTTA	(SEQ ID NO. 5497)
12RC2_HP1104R1087	CAUCAUCAUTTAATGAGAGTTCAATCTAAA	(SEQ ID NO. 5498)
12RC3_HP1105R1088	CAUCAUCAUTTTTTTATGACTTCAGCTTCA	(SEQ ID NO. 5499)
12RC4_HP1106R1089	CAUCAUCAUGGCTGTGTTTATGTTGATTT	(SEQ ID NO. 5500)
12RC5_HP1107R1090	CAUCAUCAUTGTGGGCGAGGATAACATAAG	(SEQ ID NO. 5501)

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12RC6_HP1108R1091	CAUCAUTATTACCATGTTTCAAATTAG	(SEQ ID NO. 5502)
12RC7_HP1109R1092	CAUCAUATGAAAGATTGGAACGAATTT	(SEQ ID NO. 5503)
12RC8_HP1110R1093	CAUCAUAAAAAATATGGCAAAAAGTATT	(SEQ ID NO. 5504)
12RC9_HP1111R1094	CAUCAUTATCATGTGTAAAGAAAGTCAA	(SEQ ID NO. 5505)
12RC10_HP1112R1095	CAUCAUTAAGGATTGTCGGTGTAGAA	(SEQ ID NO. 5506)
12RC11_HP1113R1096	CAUCAUTTGAAACGAGCGTTTACTTA	(SEQ ID NO. 5507)
12RC12_HP1114R1097	CAUCAUAAAAACATGCCCTTATTGTATT	(SEQ ID NO. 5508)
12RD1_HP1115R1098	CAUCAUATGATCAATTACCCTAATCTA	(SEQ ID NO. 5509)
12RD2_HP1116R1099	CAUCAUAGGAGTGAAGTTACCCAAAGC	(SEQ ID NO. 5510)
12RD3_HP1117R1100	CAUCAUAGTAACAATGGGATACGCAAG	(SEQ ID NO. 5511)
12RD4_HP1118R1101	CAUCAUGATGAGACGGAGTTTTTTGAA	(SEQ ID NO. 5512)
12RD5_HP1119R1102	CAUCAUAAAAATGGCGGAATCTTATCT	(SEQ ID NO. 5513)
12RD6_HP1120R1103	CAUCAUATGGTCGTTTACATTCTCAT	(SEQ ID NO. 5514)
12RD7_HP1121R1104	CAUCAUACTTTTATGGATTTTGTCTCT	(SEQ ID NO. 5515)
12RD8_HP1122R1105	CAUCAUATGGAATGAATATCAAAATAA	(SEQ ID NO. 5516)
12RD9_HP1123R1106	CAUCAUCATGCAAAACCATGATTTAGA	(SEQ ID NO. 5517)
12RD10_HP1124R1107	CAUCAUGGATGAAAAGGCTTTTITTA	(SEQ ID NO. 5518)
12RD11_HP1125R1108	CAUCAUATGAAGAGATCTTCTGTATT	(SEQ ID NO. 5519)
12RD12_HP1126R1109	CAUCAUAGGAAGAAACAATGAGGTATT	(SEQ ID NO. 5520)
12RE1_HP1127R1110	CAUCAUAAAAATGCCAAGTATAAGAG	(SEQ ID NO. 5521)
12RE2_HP1128R1111	CAUCAUGCTAATTTGCATGAGTAAGAG	(SEQ ID NO. 5522)
12RE3_HP1129R1112	CAUCAUGGTTTTTATGAATTACGATAA	(SEQ ID NO. 5523)
12RE4_HP1130R1113	CAUCAUATGTTAGATTCAATCGTTTAT	(SEQ ID NO. 5524)
12RE5_HP1131R1114	CAUCAUGTGATGGCTTTGTTGAAAATT	(SEQ ID NO. 5525)
12RE6_HP1132R1115	CAUCAUATGAAAGCGATGGAAGGTAAA	(SEQ ID NO. 5526)
12RE7_HP1133R1116	CAUCAUATGGCGAATTTAAGAGACATT	(SEQ ID NO. 5527)
12RE8_HP1134R1117	CAUCAUGAGATAAATAATGTCCCAACT	(SEQ ID NO. 5528)
12RE9_HP1135R1118	CAUCAUATGCAAGATTTAAAGTGATC	(SEQ ID NO. 5529)
12RE10_HP1136R1119	CAUCAUTGATGAATGTTGTAGTTAAA	(SEQ ID NO. 5530)
12RE11_HP1137R1120	CAUCAUATAGGTTTATGAATATATCGGT	(SEQ ID NO. 5531)
12RE12_HP1138R1121	CAUCAUGGTAGTGATGGCAAAAATAA	(SEQ ID NO. 5532)
12RF1_HP1139R1122	CAUCAUGATGTGAGTATGATGAGTGAA	(SEQ ID NO. 5533)

12RF2_HP1140R1123	CAUCAUGCATGAGACAATGTGAAAAAA	(SEQ ID NO. 5534)
12RF3_HP1141R1124	CAUCAUAATAACATGCGAATCGTATTTA	(SEQ ID NO. 5535)
12RF4_HP1142R1125	CAUCAUAAGTGAGCGTGAATAGTAATGG	(SEQ ID NO. 5536)
12RF5_HP1143R1126	CAUCAUCAUCATGCAAGAAAAATCAAAACCG	(SEQ ID NO. 5537)
12RF6_HP1144R1127	CAUCAUAUATGGGAAGAAGTCTTGCAATTA	(SEQ ID NO. 5538)
12RF7_HP1145R1128	CAUCAUCAUCTGTTGGTGCACGATATTACC	(SEQ ID NO. 5539)
12RF8_HP1146R1129	CAUCAUCAUATGAGAACACAGAACCTTTATTT	(SEQ ID NO. 5540)
12RF9_HP1147R1130	CAUCAUAUAACACACATGAAAAAACCGCTACA	(SEQ ID NO. 5541)
12RF10_HP1148R1131	CAUCAUCAUGTGAAAAATTCAGCGTTTAAACC	(SEQ ID NO. 5542)
12RF11_HP1149R1132	CAUCAUAUATGGTTTCTATGCTTTTAGTG	(SEQ ID NO. 5543)
12RF12_HP1150R1133	CAUCAUAUAGGTTAAATGCACGAATCAGT	(SEQ ID NO. 5544)
12RG1_HP1151R1134	CAUCAUGGAGATTTTGTGAATGACAGT	(SEQ ID NO. 5545)
12RG2_HP1152R1135	CAUCAUAUAAAAGGATAGAAAAATGTTTCA	(SEQ ID NO. 5546)
12RG3_HP1153R1136	CAUCAUAUAATGATAATGAAACAAGAACC	(SEQ ID NO. 5547)
12RG4_HP1154R1137	CAUCAUAUAAAAGGATAGTCCAGTGAATTA	(SEQ ID NO. 5548)
12RG5_HP1155R1138	CAUCAUAUATGAAAAATTCGCTCTTACAGGG	(SEQ ID NO. 5549)
12RG6_HP1156R1139	CAUCAUAUTTGCAAAACTTTGTTTTAGT	(SEQ ID NO. 5550)
12RG7_HP1157R1140	CAUCAUAUAATAAGGGAAAAATATGATAA	(SEQ ID NO. 5551)
12RG8_HP1158R1141	CAUCAUAUGGTGTGTCATGGAATCTTAC	(SEQ ID NO. 5552)
12RG9_HP1159R1142	CAUCAUGCGCGGATGCATTTAGACAGGC	(SEQ ID NO. 5553)
12RG10_HP1160R1143	CAUCAUAUATGCTAGAAAAATAGACAACCAA	(SEQ ID NO. 5554)
12RG11_HP1161R1144	CAUCAUGATATGGGAAAAAATTGGTATC	(SEQ ID NO. 5555)
12RG12_HP1162R1145	CAUCAUAUATGAAAAATAAAACGAATCAA	(SEQ ID NO. 5556)
12RH1_HP1163R1146	CAUCAUAUAGATGAATACAGAAATTTTAA	(SEQ ID NO. 5557)
12RH2_HP1164R1147	CAUCAUAUATGAATCAAGAAATTTTAGAC	(SEQ ID NO. 5558)
12RH3_HP1165R1148	CAUCAUAUCAAATGTTAAGGAAAAACATT	(SEQ ID NO. 5559)
12RH4_HP1166R1149	CAUCAUAUATGCTAACCCCAATTA AAAACT	(SEQ ID NO. 5560)
12RH5_HP1167R1150	CAUCAUCAUCATGAAAAAGGCAAGTCAGGT	(SEQ ID NO. 5561)
12RH6_HP1168R1151	CAUCAUAUAGGACATGCAAAAAGTTTAG	(SEQ ID NO. 5562)
12RH7_HP1169R1152	CAUCAUAUAGCGTTATGGCATTAGATTGG	(SEQ ID NO. 5563)
12RH8_HP1170R1153	CAUCAUAUATGGGAGTTT TACTAGAAATTA	(SEQ ID NO. 5564)
12RH9_HP1171R1154	CAUCAUAUAAATGAGCGTGATTTTAGAAA	(SEQ ID NO. 5565)

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12RH10_HP1172R1155	CAUCAUAUATGAAACAAACGGCTTTT	(SEQ ID NO. 5566)
12RH11_HP1173R1156	CAUCAUAUAGGATTTGTTGATGAGTTATT	(SEQ ID NO. 5567)
12RH12_HP1174R1157	CAUCAUAUGGTATGCAAAAACCTTCTAAC	(SEQ ID NO. 5568)
13SA1_HP1175S1158	CUACUACUACTTAACGAAAGATAATACAG	(SEQ ID NO. 5569)
13SA2_HP1176S1159	CUACUACUAGCGTTTTTTAAATTGAAAAG	(SEQ ID NO. 5570)
13SA3_HP1177S1160	CUACUAGUATTAATAGGCAACACATAATT	(SEQ ID NO. 5571)
13SA4_HP1178S1161	CUACUACUAGGCTAACTCATCATCTCCAA	(SEQ ID NO. 5572)
13SA5_HP1179S1162	CUACUACUAGGGTCATGGTTGTCCTTAA	(SEQ ID NO. 5573)
13SA6_HP1180S1163	CUACUACUACTTTTAATGAGCGTTAGCCC	(SEQ ID NO. 5574)
13SA7_HP1181S1164	CUACUACUATAATTGTTTATTTTCTAAAG	(SEQ ID NO. 5575)
13SA8_HP1182S1165	CUACUACUAAAGCTTAAGCGTCTAAATATT	(SEQ ID NO. 5576)
13SA9_HP1183S1166	CUACUACUATCAAGCTTTTTTTGTTGAGTAT	(SEQ ID NO. 5577)
13SA10_HP1184S1167	CUACUACUATTAATTATTTGGTTAAGTTTTC	(SEQ ID NO. 5578)
13SA11_HP1185S1168	CUACUACUACTCTTTATGTTTTTTTAAACT	(SEQ ID NO. 5579)
13SA12_HP1186S1169	CUACUACUAGGCTCTTCTAATCACAACCA	(SEQ ID NO. 5580)
13SB1_HP1187S1170	CUACUACUAAAACGATTTTATGGTGTCTTCT	(SEQ ID NO. 5581)
13SB2_HP1189S1172	CUACUACUATCAAGCGTTCTTAATGTAATG	(SEQ ID NO. 5582)
13SB3_HP1190S1173	CUACUACUAAAGCGACATTATAAGTCTTCAT	(SEQ ID NO. 5583)
13SB4_HP1191S1174	CUACUACUATTAAGGCTCTTCTTAAAGAGT	(SEQ ID NO. 5584)
13SB5_HP1192S1175	CUACUACUACATTAGACCACCTGAGTTTTA	(SEQ ID NO. 5585)
13SB6_HP1193S1176	CUACUACUACTTTTATTTGATTCACCATTTT	(SEQ ID NO. 5586)
13SB7_HP1194S1177	CUACUACUACGTTTTTTTAAGATTGAATACA	(SEQ ID NO. 5587)
13SB8_HP1195S1178	CUACUACUAAAATAAGAGAGCGTTATAATTA	(SEQ ID NO. 5588)
13SB9_HP1196S1179	CUACUACUATAACTCCAATTACCAGCGGTA	(SEQ ID NO. 5589)
13SB10_HP1197S1180	CUACUACUATTTCTCTCTTATTTTCTTGT	(SEQ ID NO. 5590)
13SB11_HP1198S1181	CUACUACUATATCAAAAATTAGAGTTATCC	(SEQ ID NO. 5591)
13SB12_HP1199S1182	CUACUACUAGTCTTACTTGACTTCAACCTT	(SEQ ID NO. 5592)
13SC1_HP1200S1183	CUACUACUACCATCACAGGCTCTTAGTTT	(SEQ ID NO. 5593)
13SC2_HP1201S1184	CUACUACUATAACGCTATTTAATATCCATC	(SEQ ID NO. 5594)
13SC3_HP1202S1185	CUACUACUACCAATCAATCCACAACCTCTA	(SEQ ID NO. 5595)
13SC4_HP1203S1186	CUACUACUACATGTTTTTCTCTCTTAAAAAGT	(SEQ ID NO. 5596)
13SC5_HP1204S1187	CUACUACUACTAGTCTCTTCAATTTGATTC	(SEQ ID NO. 5597)

13SC6_HP1205S1188	CUACUACUATTATTCAATAATATTGCTCAC	(SEQ ID NO. 5598)
13SC7_HP1206S1189	CUACUACUATTAGCCGAGATTGTCTTTGTG	(SEQ ID NO. 5599)
13SC8_HP1207S1190	CUACUACUACTTTACTCTTTTATAAAAGTTT	(SEQ ID NO. 5600)
13SC9_HP1208S1191	CUACUACUATGACTCTTATTGATAAGAAT	(SEQ ID NO. 5601)
13SC10_HP1209S1192	CUACUACUAGCAACCGCTATAAAGTAGTTT	(SEQ ID NO. 5602)
13SC11_HP1210S1193	CUACUACUACAACCGCTGTTTAAATAATAA	(SEQ ID NO. 5603)
13SC12_HP1211S1194	CUACUACUATTGTTTATTATTAAATTTTAG	(SEQ ID NO. 5604)
13SD1_HP1212S1195	CUACUACUATTAACTTAAGAATGGGTACT	(SEQ ID NO. 5605)
13SD2_HP1213S1196	CUACUACUACTTTTAAATAATTTAAGCCAA	(SEQ ID NO. 5606)
13SD3_HP1214S1197	CUACUACUATATTTAATGTTTCCTTTTTTAA	(SEQ ID NO. 5607)
13SD4_HP1215S1198	CUACUACUATCTCACTTACGCTGTAAAGAG	(SEQ ID NO. 5608)
13SD5_HP1216S1199	CUACUACUAAAAACCCGCCCTTTAAATAATC	(SEQ ID NO. 5609)
13SD6_HP1217S1200	CUACUACUATGATTAAACAATAACCAAAA	(SEQ ID NO. 5610)
13SD7_HP1218S1201	CUACUACUATTAAAGAATATTCTTTCAAAATC	(SEQ ID NO. 5611)
13SD8_HP1219S1202	CUACUACUAAAGTCAGTCAGTTTCTCTTAAA	(SEQ ID NO. 5612)
13SD9_HP1220S1203	CUACUACUATTATTTCAACCTTTTCTTTATA	(SEQ ID NO. 5613)
13SD10_HP1221S1204	CUACUACUACTAGCATTTTAATTTCCCGAA	(SEQ ID NO. 5614)
13SD11_HP1222S1205	CUACUACUATTAAAGCGTGCAAGCATCCAC	(SEQ ID NO. 5615)
13SD12_HP1223S1206	CUACUACUACTCATGCGCTAGTTTTTTTGT	(SEQ ID NO. 5616)
13SE1_HP1224S1207	CUACUACUATTTTAAACATTCCTTAATTCTC	(SEQ ID NO. 5617)
13SE2_HP1225S1208	CUACUACUATTTTAAATGAATGCCTACAAA	(SEQ ID NO. 5618)
13SE3_HP1226S1209	CUACUACUAAACAATCATAAACAGCCACAAAG	(SEQ ID NO. 5619)
13SE4_HP1227S1210	CUACUACUATTATTTGAGGGTGGGATGTA	(SEQ ID NO. 5620)
13SE5_HP1228S1211	CUACUACUACTATAAATACCCCTCTCTTTT	(SEQ ID NO. 5621)
13SE6_HP1229S1212	CUACUACUATTGATGATCTAATTGATACA	(SEQ ID NO. 5622)
13SE7_HP1230S1213	CUACUACUATTCACAGAGTAACCTTATTGT	(SEQ ID NO. 5623)
13SE8_HP1231S1214	CUACUACUATCATGCGGTTTTCTTTTGA	(SEQ ID NO. 5624)
13SE9_HP1232S1215	CUACUACUAGGTTCAATCCGTTTCTTCCAA	(SEQ ID NO. 5625)
13SE10_HP1233S1216	CUACUACUATTAAAGAATCACATCCATGGT	(SEQ ID NO. 5626)
13SE11_HP1234S1217	CUACUACUACATCGCTTAAATTTTAA	(SEQ ID NO. 5627)
13SE12_HP1235S1218	CUACUACUAAATTTAATGGCGCACCAAACT	(SEQ ID NO. 5628)
13SF1_HP1236S1219	CUACUACUAGAGACCATTATAAAAAACCCT	(SEQ ID NO. 5629)

13SF2_HP1237S1220	CUACUACUACCCCTAAATAATCCTTTAACA	(SEQ ID NO. 5630)
13SF3_HP1238S1221	CUACUACUAAATGCAAGGTTAGGGATTATT	(SEQ ID NO. 5631)
13SF4_HP1239S1222	CUACUACUAGCTAAACATGCCAATTTATGA	(SEQ ID NO. 5632)
13SF5_HP1240S1223	CUACUACUAAACAGCGTTTATAATGATGAAA	(SEQ ID NO. 5633)
13SF6_HP1241S1224	CUACUACUACTCCATGCTATCCCTCTAAAG	(SEQ ID NO. 5634)
13SF7_HP1242S1225	CUACUACUACCTTAAGCGCGCTCAGATTTT	(SEQ ID NO. 5635)
13SF8_HP1243S1226	CUACUACUACCAAAACATTAGTAAGCGAACA	(SEQ ID NO. 5636)
13SF9_HP1244S1227	CUACUACUATCAAAACATTTAGTGTGTTTA	(SEQ ID NO. 5637)
13SF10_HP1245S1228	CUACUACUATTAACCCCTTAAAGGGGATTT	(SEQ ID NO. 5638)
13SF11_HP1246S1229	CUACUACUATTAATTCGCTATGAGATCCTAC	(SEQ ID NO. 5639)
13SF12_HP1247S1230	CUACUACUATTTTGGGGTTAATGATTTT	(SEQ ID NO. 5640)
13SG1_HP1248S1231	CUACUACUATTTACGATACATGCTCTTTAA	(SEQ ID NO. 5641)
13SG2_HP1249S1232	CUACUACUATCAAAAACACCTTCGCATGAC	(SEQ ID NO. 5642)
13SG3_HP1250S1233	CUACUACUATCATTCAGCCTTTTAAAG	(SEQ ID NO. 5643)
13SG4_HP1251S1234	CUACUACUATCAACGCTTTTCAAAATCAAT	(SEQ ID NO. 5644)
13SG5_HP1252S1235	CUACUACUATCATTTGAAGATCCTTTCTTT	(SEQ ID NO. 5645)
13SG6_HP1253S1236	CUACUACUACTCAAATTAACCCCATCAATT	(SEQ ID NO. 5646)
13SG7_HP1254S1237	CUACUACUATTAAGAAGCTTGATCCCAGA	(SEQ ID NO. 5647)
13SG8_HP1255S1238	CUACUACUAGTAACATTAATTTTCATCCTT	(SEQ ID NO. 5648)
13SG9_HP1256S1239	CUACUACUACCATGGTTTAGACCTTTAAGA	(SEQ ID NO. 5649)
13SG10_HP1257S1240	CUACUACUATTTTAGTTGCCACGACTTCCT	(SEQ ID NO. 5650)
13SG11_HP1258S1241	CUACUACUATTTTTCATGTTGCCCTCCTTGA	(SEQ ID NO. 5651)
13SG12_HP1259S1242	CUACUACUATTAAGAAGCCATTTCTATGAG	(SEQ ID NO. 5652)
13SH1_HP1260S1243	CUACUACUAGCATTAATTTACCTCTAATTT	(SEQ ID NO. 5653)
13SH2_HP1261S1244	CUACUACUATCTTACCATCACACTAACCTT	(SEQ ID NO. 5654)
13SH3_HP1262S1245	CUACUACUAGAGCCATTTTATAGCCTCTTT	(SEQ ID NO. 5655)
13SH4_HP1263S1246	CUACUACUAGCGTTTCATCTATCCACCTCG	(SEQ ID NO. 5656)
13SH5_HP1264S1247	CUACUACUATCAAAATCAAGCCTTTTCTCT	(SEQ ID NO. 5657)
13SH6_HP1265S1248	CUACUACUATCATGAAATTCCTTGAGAGTG	(SEQ ID NO. 5658)
13SH7_HP1266S1249	CUACUACUAGCTCATGCTTGCTCCTTTAAA	(SEQ ID NO. 5659)
13SH8_HP1267S1250	CUACUACUAAAACCTCCTTTTAAATTAAT	(SEQ ID NO. 5660)
13SH9_HP1268S1251	CUACUACUAGGTTTCAAAACATTTTCATCTC	(SEQ ID NO. 5661)

13SH10_HP1269S1252	CUACUACUAGTTTAAACCCTATCATAGAGAT	(SEQ ID NO. 5662)
13SH11_HP1270S1253	CUACUACUACTCAACCTTTCATAGCGTTTA	(SEQ ID NO. 5663)
13SH12_HP1271S1254	CUACUACUATATATCTCCCAAAAAGCTAC	(SEQ ID NO. 5664)
13RA1_HP1175R1158	CAUCAUCAUATGGGTTTTCAGCTTAA	(SEQ ID NO. 5665)
13RA2_HP1176R1159	CAUCAUCAUATAATGCTTTCGCCATTTTA	(SEQ ID NO. 5666)
13RA3_HP1177R1160	CAUCAUCAUATCTTATGAAAAAACGAAAA	(SEQ ID NO. 5667)
13RA4_HP1178R1161	CAUCAUCAUCATGACCCCTCACATCAACGC	(SEQ ID NO. 5668)
13RA5_HP1179R1162	CAUCAUCAUAAACATGCAAAAAGAGTGGT	(SEQ ID NO. 5669)
13RA6_HP1180R1163	CAUCAUCAUATGATTTTGTAGCTCTCTTTT	(SEQ ID NO. 5670)
13RA7_HP1181R1164	CAUCAUCAUATGTTTAAAGAAAATTTTCCA	(SEQ ID NO. 5671)
13RA8_HP1182R1165	CAUCAUCAUAGGATCAAAAATGGCCTATGA	(SEQ ID NO. 5672)
13RA9_HP1183R1166	CAUCAUCAUCATGCATGCAGAAATTTTCAC	(SEQ ID NO. 5673)
13RA10_HP1184R1167	CAUCAUCAUAAATGCTAATAAAAAAGATTG	(SEQ ID NO. 5674)
13RA11_HP1185R1168	CAUCAUCAUCCCTTAAGATTTTAAATGATGA	(SEQ ID NO. 5675)
13RA12_HP1186R1169	CAUCAUCAUTAAAGGATAATTAAATGAAAA	(SEQ ID NO. 5676)
13RB1_HP1187R1170	CAUCAUCAUAAATATGACTATATACACTACA	(SEQ ID NO. 5677)
13RB2_HP1189R1172	CAUCAUCAUGGAGAAAAACGATGAAGACTTA	(SEQ ID NO. 5678)
13RB3_HP1190R1173	CAUCAUCAUATGATTACCCCTAAAGTGTG	(SEQ ID NO. 5679)
13RB4_HP1191R1174	CAUCAUCAUCTATTGATGAGCGTAAATGCA	(SEQ ID NO. 5680)
13RB5_HP1192R1175	CAUCAUCAUGTATGAAAAAGCAAACTCTGA	(SEQ ID NO. 5681)
13RB6_HP1193R1176	CAUCAUCAUATGCAACACAGCGTCATTAGGC	(SEQ ID NO. 5682)
13RB7_HP1194R1177	CAUCAUCAUGTAGCAATGCTCTTTTAAAAAT	(SEQ ID NO. 5683)
13RB8_HP1195R1178	CAUCAUCAUGAGTTAGAATGGCTAGAAAAA	(SEQ ID NO. 5684)
13RB9_HP1196R1179	CAUCAUCAUAAAAACATGAGAGAAGAGAAA	(SEQ ID NO. 5685)
13RB10_HP1197R1180	CAUCAUCAUAAATAGTGCCTACTATCAATCA	(SEQ ID NO. 5686)
13RB11_HP1198R1181	CAUCAUCAUATGTCAAAAAAAATTCCTCCTA	(SEQ ID NO. 5687)
13RB12_HP1199R1182	CAUCAUCAUGGATTATGGCAATTTCAAAAG	(SEQ ID NO. 5688)
13RC1_HP1200R1183	CAUCAUCAUAGATGCAAAAACACATCAAA	(SEQ ID NO. 5689)
13RC2_HP1201R1184	CAUCAUCAUATCGTGGCAAAAAAAGTATTT	(SEQ ID NO. 5690)
13RC3_HP1202R1185	CAUCAUCAUATGGCTAAAAAAGTAGTCGGA	(SEQ ID NO. 5691)
13RC4_HP1203R1186	CAUCAUCAUGAATAATGATGGATTGGTATG	(SEQ ID NO. 5692)
13RC5_HP1204R1187	CAUCAUCAUATTATGAAAAGTTAAATAGG	(SEQ ID NO. 5693)

13RC6_HP1205R1188	CAUCAUCAUTGGCAAAAGAAAGTTTAAAC	(SEQ ID NO. 5694)
13RC7_HP1206R1189	CAUCAUCAUACCTTAAATTATGGCAAAAAA	(SEQ ID NO. 5695)
13RC8_HP1207R1190	CAUCAUCAUAATCATGGCGCTTGAAGTGCT	(SEQ ID NO. 5696)
13RC9_HP1208R1191	CAUCAUCAUAATGAACACTACATCGGTTCTA	(SEQ ID NO. 5697)
13RC10_HP1209R1192	CAUCAUCAUTTTAATTTGGAGTTTGATAAA	(SEQ ID NO. 5698)
13RC11_HP1210R1193	CAUCAUCAUATGCTGGATTTGTCTTATAGC	(SEQ ID NO. 5699)
13RC12_HP1211R1194	CAUCAUCAUGATTGAAAAAGATTACTATTA	(SEQ ID NO. 5700)
13RD1_HP1212R1195	CAUCAUCAUATGAAATTTTGTAGCGTTATTT	(SEQ ID NO. 5701)
13RD2_HP1213R1196	CAUCAUCAUATATGGATTTTATCACCATCA	(SEQ ID NO. 5702)
13RD3_HP1214R1197	CAUCAUCAUGTGAGAAAAAGGAATGCATTG	(SEQ ID NO. 5703)
13RD4_HP1215R1198	CAUCAUCAUATGAGCGCGGATGTGGGTTA	(SEQ ID NO. 5704)
13RD5_HP1216R1199	CAUCAUCAUTATCATGATTTTATTTGGTTGT	(SEQ ID NO. 5705)
13RD6_HP1217R1200	CAUCAUCAUGAATGCACCTCTCCAAATTTAG	(SEQ ID NO. 5706)
13RD7_HP1218R1201	CAUCAUCAUATGAAAGATAACAATAACTAT	(SEQ ID NO. 5707)
13RD8_HP1219R1202	CAUCAUCAUAAATGCCATCACACAAAACC	(SEQ ID NO. 5708)
13RD9_HP1220R1203	CAUCAUCAUTAAATGCTAGTAGAAATAGA	(SEQ ID NO. 5709)
13RD10_HP1221R1204	CAUCAUCAUGGCATTTGGACAACACTCTCAA	(SEQ ID NO. 5710)
13RD11_HP1222R1205	CAUCAUCAUGTGCCTGTGTGAAGAAAATTAT	(SEQ ID NO. 5711)
13RD12_HP1223R1206	CAUCAUCAUGATAAACAATGCTTGAAGATTA	(SEQ ID NO. 5712)
13RE1_HP1224R1207	CAUCAUCAUATGAGGGAGATTGTATGGGTG	(SEQ ID NO. 5713)
13RE2_HP1225R1208	CAUCAUCAUGCATGAATTTTGTCTTTTAT	(SEQ ID NO. 5714)
13RE3_HP1226R1209	CAUCAUCAUTGAAGTGAAATGAGAGAAAT	(SEQ ID NO. 5715)
13RE4_HP1227R1210	CAUCAUCAUACAAACGATGAAAAAGGTTAT	(SEQ ID NO. 5716)
13RE5_HP1228R1211	CAUCAUCAUAAGACCTATGCTACATAAAAA	(SEQ ID NO. 5717)
13RE6_HP1229R1212	CAUCAUCAUTAGGGTGTGTTAATCGTTCAAAA	(SEQ ID NO. 5718)
13RE7_HP1230R1213	CAUCAUCAUCAATGAAAAAATTTCTACGATT	(SEQ ID NO. 5719)
13RE8_HP1231R1214	CAUCAUCAUACTCTGTGAAAAAACTCCAACC	(SEQ ID NO. 5720)
13RE9_HP1232R1215	CAUCAUCAUATGATTGTAAACGCCCTTAAC	(SEQ ID NO. 5721)
13RE10_HP1233R1216	CAUCAUCAUATGGCTGTTTCTTCTATCAAT	(SEQ ID NO. 5722)
13RE11_HP1234R1217	CAUCAUCAUATGCGTAATACCATTTTATTT	(SEQ ID NO. 5723)
13RE12_HP1235R1218	CAUCAUCAUATGCAACTAAGCCCTTACAA	(SEQ ID NO. 5724)
13RF1_HP1236R1219	CAUCAUCAUAAAAATCATGAGACTCAAACTA	(SEQ ID NO. 5725)

13RF2_HP1237R1220	CAUCAUATGGTCTCTCTCTATTAGAA	(SEQ ID NO. 5726)
13RF3_HP1238R1221	CAUCAUATGGGAAGTATCGGTAGTATG	(SEQ ID NO. 5727)
13RF4_HP1239R1222	CAUCAUATGGGGTCTTGGTCTCGTATT	(SEQ ID NO. 5728)
13RF5_HP1240R1223	CAUCAUGGGATAGCATGGAGCTTATTT	(SEQ ID NO. 5729)
13RF6_HP1241R1224	CAUCAUATGGATATTTCGCAACGAATTT	(SEQ ID NO. 5730)
13RF7_HP1242R1225	CAUCAUATGTTCCATGAATTTAGAGAC	(SEQ ID NO. 5731)
13RF8_HP1243R1226	CAUCAUAAAAACATGAAAAACACATC	(SEQ ID NO. 5732)
13RF9_HP1244R1227	CAUCAUATGGAAGAAAGAAACGCTATTCA	(SEQ ID NO. 5733)
13RF10_HP1245R1228	CAUCAUCATGTTTAATAAAGTGATTAT	(SEQ ID NO. 5734)
13RF11_HP1246R1229	CAUCAUTGGATGAGGCATTATGAAACG	(SEQ ID NO. 5735)
13RF12_HP1247R1230	CAUCAUATGTATCGTAAAGATTTGGAC	(SEQ ID NO. 5736)
13RG1_HP1248R1231	CAUCAUTTGATGCAAGGGTTTTTAAGA	(SEQ ID NO. 5737)
13RG2_HP1249R1232	CAUCAUGGCTGAATGAAAGAAATAATGA	(SEQ ID NO. 5738)
13RG3_HP1250R1233	CAUCAUAGGAATGAAAACTGAGATGAA	(SEQ ID NO. 5739)
13RG4_HP1251R1234	CAUCAUGATCTTCAATGATGCTTACA	(SEQ ID NO. 5740)
13RG5_HP1252R1235	CAUCAUGGGGTTAATTGAGTGTCTT	(SEQ ID NO. 5741)
13RG6_HP1253R1236	CAUCAUGTGGTTACAATAACACTAACT	(SEQ ID NO. 5742)
13RG7_HP1254R1237	CAUCAUTTTGGACTCTTTTCATTCATT	(SEQ ID NO. 5743)
13RG8_HP1255R1238	CAUCAUTTTAGGCATTTAAGGAATCAG	(SEQ ID NO. 5744)
13RG9_HP1256R1239	CAUCAUAAAAATAATGTTACAGGCCATT	(SEQ ID NO. 5745)
13RG10_HP1257R1240	CAUCAUATGGATATTAAAGCATGTTAT	(SEQ ID NO. 5746)
13RG11_HP1258R1241	CAUCAUGTGGCAACTAAAAACAATAA	(SEQ ID NO. 5747)
13RG12_HP1259R1242	CAUCAUTGATGGCTTGTGGGAAAGGC	(SEQ ID NO. 5748)
13RH1_HP1260R1243	CAUCAUGATGCAACACAGCCACAGAAGC	(SEQ ID NO. 5749)
13RH2_HP1261R1244	CAUCAUGTGAAATAATGCAACAAGCAC	(SEQ ID NO. 5750)
13RH3_HP1262R1245	CAUCAUAGGTTAGTGTGATGGTAAGAA	(SEQ ID NO. 5751)
13RH4_HP1263R1246	CAUCAUAAATGGCTCAAAATTTACGAA	(SEQ ID NO. 5752)
13RH5_HP1264R1247	CAUCAUAGATGAAACGCTTTGATTAC	(SEQ ID NO. 5753)
13RH6_HP1265R1248	CAUCAUATTTTGAGCGGCTTTAACCCC	(SEQ ID NO. 5754)
13RH7_HP1266R1249	CAUCAUGGAATTTTATGATCACAATGA	(SEQ ID NO. 5755)
13RH8_HP1267R1250	CAUCAUAAAGCATGAGCGCTTATATCAT	(SEQ ID NO. 5756)
13RH9_HP1268R1251	CAUCAUTATGGCCAAACAAGAATACAA	(SEQ ID NO. 5757)

13RH10_HP1269R1252	CAUCAUAUATGTTTGAAACCATTTGCCCTTT	(SEQ ID NO. 5758)
13RH11_HP1270R1253	CAUCAUGAATCTCTATGATAGGTTAA	(SEQ ID NO. 5759)
13RH12_HP1271R1254	CAUCAUAUATGCAATATCTCTTTTGCTG	(SEQ ID NO. 5760)
14SA1_HP1272S1255	CUACUACUAGACTATCTATTAAACATAAGAG	(SEQ ID NO. 5761)
14SA2_HP1273S1256	CUACUACUATTTTGACTTAAGCCACAAATT	(SEQ ID NO. 5762)
14SA3_HP1274S1257	CUACUACUATTAAGACTCTCTTTTGTGAA	(SEQ ID NO. 5763)
14SA4_HP1275S1258	CUACUACUACTCTATTTTAAAGTTTCTTA	(SEQ ID NO. 5764)
14SA5_HP1276S1259	CUACUACUATGTTTAGTCCTTTTCGTCTTC	(SEQ ID NO. 5765)
14SA6_HP1277S1260	CUACUACUATTAAAAAATCATTCCTCCTAT	(SEQ ID NO. 5766)
14SA7_HP1278S1261	CUACUACUAACTCATTTTAAACCTCCTTT	(SEQ ID NO. 5767)
14SA8_HP1279S1262	CUACUACUATCATCTTAATACTCTCTTAA	(SEQ ID NO. 5768)
14SA9_HP1281S1263	CUACUACUATCTCTTTTCATAATAACCTTC	(SEQ ID NO. 5769)
14SA10_HP1282S1264	CUACUACUATTCAAGCTTGTTTTCCTGA	(SEQ ID NO. 5770)
14SA11_HP1283S1265	CUACUACUATCAAACTCGTTCAAAATAGGT	(SEQ ID NO. 5771)
14SA12_HP1284S1266	CUACUACUACTACATCTTGCGGTAATTGAT	(SEQ ID NO. 5772)
14SB1_HP1285S1267	CUACUACUAGTTCTTATGCGATGGATAAAT	(SEQ ID NO. 5773)
14SB2_HP1286S1268	CUACUACUATTTATGGGCGTAAGCTTCTAG	(SEQ ID NO. 5774)
14SB3_HP1287S1269	CUACUACUATCAACTTTGATACGCCATATC	(SEQ ID NO. 5775)
14SB4_HP1288S1270	CUACUACUACCCAAAGCTACCTGTCTATACA	(SEQ ID NO. 5776)
14SB5_HP1289S1271	CUACUACUATTAATCACCACTTAATTA	(SEQ ID NO. 5777)
14SB6_HP1290S1272	CUACUACUATCACTGCTTGCACTGACTTATT	(SEQ ID NO. 5778)
14SB7_HP1291S1273	CUACUACUAAACCGCTTATAAGAAATTTTG	(SEQ ID NO. 5779)
14SB8_HP1292S1274	CUACUACUATTTCAATACAAATCAATGGTG	(SEQ ID NO. 5780)
14SB9_HP1293S1275	CUACUACUATCAGTCGTTACCTCCTTTATC	(SEQ ID NO. 5781)
14SB10_HP1294S1276	CUACUACUATTAATACTAGAAATCAATCTAC	(SEQ ID NO. 5782)
14SB11_HP1295S1277	CUACUACUACCTCCTTACACTCTTCTTCTT	(SEQ ID NO. 5783)
14SB12_HP1296S1278	CUACUACUAACTCTCTTATTCGCTACTTGC	(SEQ ID NO. 5784)
14SC1_HP1297S1279	CUACUACUAAATGCTTTATCTCTTGTCTTGT	(SEQ ID NO. 5785)
14SC2_HP1298S1280	CUACUACUAAATTCATTTATATCTAAAGT	(SEQ ID NO. 5786)
14SC3_HP1299S1281	CUACUACUACCATTAACGCTCCGTAAGAAAT	(SEQ ID NO. 5787)
14SC4_HP1300S1282	CUACUACUAGATTGCCATTAAAGCCTACC	(SEQ ID NO. 5788)
14SC5_HP1301S1283	CUACUACUATTACTTCTGCTGCTGCTTGT	(SEQ ID NO. 5789)

14SC6_HP1302S1284	CUACUACUATTTTAACTACGCCTTGATTT	(SEQ ID NO. 5790)
14SC7_HP1303S1285	CUACUACUAGTCATAGAGCGATCCCGTTCT	(SEQ ID NO. 5791)
14SC8_HP1304S1286	CUACUACUATTTATTTTGTAGCTGTTTACC	(SEQ ID NO. 5792)
14SC9_HP1305S1287	CUACUACUAAATCCTTTTACCAAATGCTACA	(SEQ ID NO. 5793)
14SC10_HP1306S1288	CUACUACUACTTACCACACTGGCTTTTCTCA	(SEQ ID NO. 5794)
14SC11_HP1307S1289	CUACUACUAAATTAACCCCTTATCTCACTTT	(SEQ ID NO. 5795)
14SC12_HP1308S1290	CUACUACUAACTCCTTAGGCTTCTTCACA	(SEQ ID NO. 5796)
14SD1_HP1309S1291	CUACUACUACTTTTTCATTATACAACTCCG	(SEQ ID NO. 5797)
14SD2_HP1310S1292	CUACUACUAGCTTATCTCCCACTACTAAA	(SEQ ID NO. 5798)
14SD3_HP1311S1293	CUACUACUATTACTCAACGCTAGAAGAATA	(SEQ ID NO. 5799)
14SD4_HP1312S1294	CUACUACUACTTTTATCTTTCAATTCAGTA	(SEQ ID NO. 5800)
14SD5_HP1313S1295	CUACUACUAAATTTGCTCCTCCTCTCTGTC	(SEQ ID NO. 5801)
14SD6_HP1314S1296	CUACUACUACTACTTACCTTCTGCTTGATT	(SEQ ID NO. 5802)
14SD7_HP1315S1297	CUACUACUACCCCTTACTTGCCAATCTTTT	(SEQ ID NO. 5803)
14SD8_HP1316S1298	CUACUACUATTTAACCTTTATTTATGTTTC	(SEQ ID NO. 5804)
14SD9_HP1317S1299	CUACUACUACCTTTTCTTAAGCACCAGGGC	(SEQ ID NO. 5805)
14SD10_HP1318S1300	CUACUACUATTTTACTCCTCTGTCTTATC	(SEQ ID NO. 5806)
14SD11_HP1319S1301	CUACUACUATTTATACCGCTCTAATGCGTCC	(SEQ ID NO. 5807)
14SD12_HP1320S1302	CUACUACUAAAGGACTACTTCGTTTCCATAG	(SEQ ID NO. 5808)
14SE1_HP1321S1303	CUACUACUAAATTATACCACAAATAGATTGAA	(SEQ ID NO. 5809)
14SE2_HP1322S1304	CUACUACUAACTCTTAGAGGTGAACAACG	(SEQ ID NO. 5810)
14SE3_HP1323S1305	CUACUACUACCTTTTAAATAAGCGTTGTT	(SEQ ID NO. 5811)
14SE4_HP1324S1306	CUACUACUATCCCTACTCACATGTTTCATG	(SEQ ID NO. 5812)
14SE5_HP1325S1307	CUACUACUATCAAGCCTTAGGCCCGATCAT	(SEQ ID NO. 5813)
14SE6_HP1326S1308	CUACUACUATCTTATAAATCCAGGCTTGTT	(SEQ ID NO. 5814)
14SE7_HP1327S1309	CUACUACUATCATTTCTAATCCTTTAAGGTT	(SEQ ID NO. 5815)
14SE8_HP1328S1310	CUACUACUATCATTTCAATAATCCCCATTGT	(SEQ ID NO. 5816)
14SE9_HP1329S1311	CUACUACUATCATGTTTGATTGCTTTTAAT	(SEQ ID NO. 5817)
14SE10_HP1330S1312	CUACUACUATTAGGGATTAAAAAAGCCTT	(SEQ ID NO. 5818)
14SE11_HP1331S1313	CUACUACUAAATCAACATTTCTAACTGCTTCC	(SEQ ID NO. 5819)
14SE12_HP1332S1314	CUACUACUATTTATTTGAACCACTCTTTAAT	(SEQ ID NO. 5820)
14SF1_HP1333S1315	CUACUACUATTGTCTCTACTCTTGCTTAAAA	(SEQ ID NO. 5821)

14SF2_HP1334S1316	CUACUACUATTATTGTTGTTTAAATTGTGG	(SEQ ID NO. 5822)
14SF3_HP1335S1317	CUACUACUATAGTCTTTAGTTTTTAAACA	(SEQ ID NO. 5823)
14SF4_HP1336S1318	CUACUACUAGGTTTAGGCGTGTTTTTTAAT	(SEQ ID NO. 5824)
14SF5_HP1337S1319	CUACUACUAGCCTAAACCCCTAAACTAGCC	(SEQ ID NO. 5825)
14SF6_HP1338S1320	CUACUACUATAAGACGCTATTTCATTGTATT	(SEQ ID NO. 5826)
14SF7_HP1339S1321	CUACUACUATTTCATTTTTTTCATGATCCTG	(SEQ ID NO. 5827)
14SF8_HP1340S1322	CUACUACUAAACACTCGTTGAAACTTTACTG	(SEQ ID NO. 5828)
14SF9_HP1341S1323	CUACUACUAAAATCAGTCTTCTTTCAAAGCTA	(SEQ ID NO. 5829)
14SF10_HP1342S1324	CUACUACUATTAGTAAGCAACACATAATT	(SEQ ID NO. 5830)
14SF11_HP1343S1325	CUACUACUATTTTAACTTTTTTTCATTTT	(SEQ ID NO. 5831)
14SF12_HP1344S1326	CUACUACUACTACACACGCTTTCTTTTTT	(SEQ ID NO. 5832)
14SG1_HP1345S1327	CUACUACUAGAGTTAATGGCGTTTGTCCA	(SEQ ID NO. 5833)
14SG2_HP1346S1328	CUACUACUATCTTTTAAATTTTGTGCTATAT	(SEQ ID NO. 5834)
14SG3_HP1347S1329	CUACUACUACATCAATCATAAACTAAATC	(SEQ ID NO. 5835)
14SG4_HP1348S1330	CUACUACUAGTCAAAAAGCTTCATTGTTT	(SEQ ID NO. 5836)
14SG5_HP1349S1331	CUACUACUACGATTGGACTTTTATTTGAC	(SEQ ID NO. 5837)
14SG6_HP1350S1332	CUACUACUAAACCCCATGAGTTTATTTCT	(SEQ ID NO. 5838)
14SG7_HP1351S1333	CUACUACUACTCTATCGCAAGACAAATAAC	(SEQ ID NO. 5839)
14SG8_HP1352S1334	CUACUACUATTAAGAGTCCCTTTTGGCAGAT	(SEQ ID NO. 5840)
14SG9_HP1354S1335	CUACUACUATGGGTGTTTTAGGGTTGTGTG	(SEQ ID NO. 5841)
14SG10_HP1355S1336	CUACUACUAGTCTTTAAGCCATTTTCATGT	(SEQ ID NO. 5842)
14SG11_HP1356S1337	CUACUACUACCATTAAGATAACTCCATCAT	(SEQ ID NO. 5843)
14SG12_HP1357S1338	CUACUACUACGTTATCAGTTGGCATGAAAT	(SEQ ID NO. 5844)
14SH1_HP1358S1339	CUACUACUACTACCATTTTAAACCTGCCAA	(SEQ ID NO. 5845)
14SH2_HP1359S1340	CUACUACUATCATAAATTTTAAAGCCTTTCT	(SEQ ID NO. 5846)
14SH3_HP1360S1341	CUACUACUAAACTCATGCTGCTTAAACCC	(SEQ ID NO. 5847)
14SH4_HP1361S1342	CUACUACUAACTTTCTAACCTACAATTAA	(SEQ ID NO. 5848)
14SH5_HP1362S1343	CUACUACUATCAAGTTGTAACATATATCATA	(SEQ ID NO. 5849)
14SH6_HP1363S1344	CUACUACUATTATCCTTTTATAATTGTTTG	(SEQ ID NO. 5850)
14SH7_HP1364S1345	CUACUACUATTATCCTTTGAAATTGAACGCA	(SEQ ID NO. 5851)
14SH8_HP1366S1347	CUACUACUAAATTTTATCAGCCGTTTTTAGA	(SEQ ID NO. 5852)
14SH9_HP1367S1348	CUACUACUATTTTATTCGCATTCATTATA	(SEQ ID NO. 5853)

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14SH10_HP1368S1349	CUACUACUATAAAATCTTATTCAAAATCAA	(SEQ ID NO. 5854)
14SH11_HP1370S1350	CUACUACUAGATTTTCTCCTTACCATAATGA	(SEQ ID NO. 5855)
14SH12_HP1371S1351	CUACUACUATAAAATTAGGCTAATTGTTTT	(SEQ ID NO. 5856)
14RA1_HP1272R1255	CAUCAUCAUAGATAAGAAATGCAGTTTTTA	(SEQ ID NO. 5857)
14RA2_HP1273R1256	CAUCAUCAUTCTCTTTATGTTAATAGATAGT	(SEQ ID NO. 5858)
14RA3_HP1274R1257	CAUCAUCAUTTTGTGGCTTAAGTCAAAAAT	(SEQ ID NO. 5859)
14RA4_HP1275R1258	CAUCAUCAUATAACATGGACATTAGCATTT	(SEQ ID NO. 5860)
14RA5_HP1276R1259	CAUCAUCAUATGGATAAAAAAGGACAAAAAT	(SEQ ID NO. 5861)
14RA6_HP1277R1260	CAUCAUCAUAAGGAGGTTTAAAAATGAGGTA	(SEQ ID NO. 5862)
14RA7_HP1278R1261	CAUCAUCAUAAGAGAGATATTAAAGATGAATA	(SEQ ID NO. 5863)
14RA8_HP1279R1262	CAUCAUCAUCATGCCCTAGCGTGTAGAAAA	(SEQ ID NO. 5864)
14RA9_HP1281R1263	CAUCAUCAUAGCTTATGAAAAATCTTTTTTA	(SEQ ID NO. 5865)
14RA10_HP1282R1264	CAUCAUCAUTGATGATCAGTCTCATAGAAA	(SEQ ID NO. 5866)
14RA11_HP1283R1265	CAUCAUCAUCTGTTTTTTGAAATCTTTACTC	(SEQ ID NO. 5867)
14RA12_HP1284R1266	CAUCAUCAUATGGATTTTATAGGGTTTGAA	(SEQ ID NO. 5868)
14RB1_HP1285R1267	CAUCAUCAUATGAGTGTTTTAAATGCCAAA	(SEQ ID NO. 5869)
14RB2_HP1286R1268	CAUCAUCAUAATGAAAAAAGCGTTAATATC	(SEQ ID NO. 5870)
14RB3_HP1287R1269	CAUCAUCAUAAATGCAAGTTTCACAATATC	(SEQ ID NO. 5871)
14RB4_HP1288R1270	CAUCAUCAUGTGTGCCAAACATGCCCTTGAA	(SEQ ID NO. 5872)
14RB5_HP1289R1271	CAUCAUCAUGGAGAGAGCATGAATGTCAAA	(SEQ ID NO. 5873)
14RB6_HP1290R1272	CAUCAUCAUGCATGTTAATAAACCAACCAAC	(SEQ ID NO. 5874)
14RB7_HP1291R1273	CAUCAUCAUGTCATGCAAGCAGTGATTTTA	(SEQ ID NO. 5875)
14RB8_HP1292R1274	CAUCAUCAUATGAGACACAAACACGGATAC	(SEQ ID NO. 5876)
14RB9_HP1293R1275	CAUCAUCAUGGGTTAGAGCATGAAAAGTTAT	(SEQ ID NO. 5877)
14RB10_HP1294R1276	CAUCAUCAUATGGCAAGATATAGAGGTGCA	(SEQ ID NO. 5878)
14RB11_HP1295R1277	CAUCAUCAUTAAATGGCTAAGAGAAAATGTAA	(SEQ ID NO. 5879)
14RB12_HP1296R1278	CAUCAUCAUATAAAGCATGGCAAGGATTGC	(SEQ ID NO. 5880)
14RC1_HP1297R1279	CAUCAUCAUATGAAAGTCAAGGCCATCAGTG	(SEQ ID NO. 5881)
14RC2_HP1298R1280	CAUCAUCAUTTAATGGCAAGAGATGATGTT	(SEQ ID NO. 5882)
14RC3_HP1299R1281	CAUCAUCAUTTAATGGCAATCTCTATTAAA	(SEQ ID NO. 5883)
14RC4_HP1300R1282	CAUCAUCAUATGAATAAAGCTATTGCTAGT	(SEQ ID NO. 5884)
14RC5_HP1301R1283	CAUCAUCAUATGATAATGGGATTAGAAAAAT	(SEQ ID NO. 5885)

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14RC6_HP1302R1284	CAUCAUTATGACAGAAAGGAAAGGTAT	(SEQ ID NO. 5886)
14RC7_HP1303R1285	CAUCAUGTGATGAACGCGAAAGCATTG	(SEQ ID NO. 5887)
14RC8_HP1304R1286	CAUCAUAUATGTCAAGAATCGGGAAAAGA	(SEQ ID NO. 5888)
14RC9_HP1305R1287	CAUCAUGGATAAGATATGTTAAATGAT	(SEQ ID NO. 5889)
14RC10_HP1306R1288	CAUCAUAAAAGTGAGATAAGGGTTAA	(SEQ ID NO. 5890)
14RC11_HP1307R1289	CAUCAUCAUATGTTTGGTTTGAAACAATT	(SEQ ID NO. 5891)
14RC12_HP1308R1290	CAUCAUAUATGAAAAGCGAAATCAAAAAA	(SEQ ID NO. 5892)
14RD1_HP1309R1291	CAUCAUAUATGATACAGAGTTTACAAGA	(SEQ ID NO. 5893)
14RD2_HP1310R1292	CAUCAUAUAGGGTAAGCAATGAATACAAA	(SEQ ID NO. 5894)
14RD3_HP1311R1293	CAUCAUAUATGAAAATATACTGAATTGAAA	(SEQ ID NO. 5895)
14RD4_HP1312R1294	CAUCAUAUAATCATGTTAATGCCAAAAAG	(SEQ ID NO. 5896)
14RD5_HP1313R1295	CAUCAUAGGCATGGGACAAAAAGTTAAT	(SEQ ID NO. 5897)
14RD6_HP1314R1296	CAUCAUAUATGAGTAAAGCGTTATTAGA	(SEQ ID NO. 5898)
14RD7_HP1315R1297	CAUCAUAUAATGTCTAGGTCAATTAAAAA	(SEQ ID NO. 5899)
14RD8_HP1316R1298	CAUCAUAUATGGCGATTAAACTTATAAG	(SEQ ID NO. 5900)
14RD9_HP1317R1299	CAUCAUAUATGGCAGACATCATGGATATA	(SEQ ID NO. 5901)
14RD10_HP1318R1300	CAUCAUAUATGAGTAAGGCCATCGTTTAA	(SEQ ID NO. 5902)
14RD11_HP1319R1301	CAUCAUAGGTTAGATATGGAAATTTTAA	(SEQ ID NO. 5903)
14RD12_HP1320R1302	CAUCAUAUATGAGAGAGTTTATGGAAAAA	(SEQ ID NO. 5904)
14RE1_HP1321R1303	CAUCAUAUATAAAAAATGCGCTACGATTAT	(SEQ ID NO. 5905)
14RE2_HP1322R1304	CAUCAUAGGTTGTTTAAATGATTTTAA	(SEQ ID NO. 5906)
14RE3_HP1323R1305	CAUCAUAUATGGGTTGCGTATCAATGACT	(SEQ ID NO. 5907)
14RE4_HP1324R1306	CAUCAUAUATGAATCCTGAAAAAGCCACT	(SEQ ID NO. 5908)
14RE5_HP1325R1307	CAUCAUAUATGCAATTTAGAATTGAACAT	(SEQ ID NO. 5909)
14RE6_HP1326R1308	CAUCAUCAUAAAACGATGAAAAAGTTAGC	(SEQ ID NO. 5910)
14RE7_HP1327R1309	CAUCAUGAGCATGCTATCTTTTATAAG	(SEQ ID NO. 5911)
14RE8_HP1328R1310	CAUCAUGAATGAAACGGATTTTATGGT	(SEQ ID NO. 5912)
14RE9_HP1329R1311	CAUCAUGGGATTATTGAATGATAGAAA	(SEQ ID NO. 5913)
14RE10_HP1330R1312	CAUCAUAUAGAATGTTGATGCATTTCTAT	(SEQ ID NO. 5914)
14RE11_HP1331R1313	CAUCAUAUATGTTGATGCATGAGTTTCTAA	(SEQ ID NO. 5915)
14RE12_HP1332R1314	CAUCAUAUATCGTGAATTGAGTTATTATG	(SEQ ID NO. 5916)
14RF1_HP1333R1315	CAUCAUAUATGAGATTTTTTTGCTTTTTC	(SEQ ID NO. 5917)

14RF2_HP1334R1316	CAUCAUAUATGTCAAAAAAAGTAGCTATA	(SEQ ID NO. 5918)
14RF3_HP1335R1317	CAUCAUAUTGGTTAAAAAAGGTGGTTAT	(SEQ ID NO. 5919)
14RF4_HP1336R1318	CAUCAUAUGTAATGGCCAAAATTGAATTG	(SEQ ID NO. 5920)
14RF5_HP1337R1319	CAUCAUAUGCGTCTAGCTTTGAATACAAT	(SEQ ID NO. 5921)
14RF6_HP1338R1320	CAUCAUAUAATGGATACACCCCAATAAAGA	(SEQ ID NO. 5922)
14RF7_HP1339R1321	CAUCAUAUATGTCTGTATCGCATGTTGCT	(SEQ ID NO. 5923)
14RF8_HP1340R1322	CAUCAUAUAAATGAAAAGCATCAGAAAGAG	(SEQ ID NO. 5924)
14RF9_HP1341R1323	CAUCAUAUATGAAAATTTCTCCATCTCCA	(SEQ ID NO. 5925)
14RF10_HP1342R1324	CAUCAUAUAACATGAAAAAATCCCTCTTA	(SEQ ID NO. 5926)
14RF11_HP1343R1325	CAUCAUAUTCATGGAAATTTTATCCTCAC	(SEQ ID NO. 5927)
14RF12_HP1344R1326	CAUCAUAUAAGGATCGCTTATGGTGAACG	(SEQ ID NO. 5928)
14RG1_HP1345R1327	CAUCAUAUTTCACTGTTAGCTAAAAATGTGG	(SEQ ID NO. 5929)
14RG2_HP1346R1328	CAUCAUAUAAAGGAAAACATGCCAATTA	(SEQ ID NO. 5930)
14RG3_HP1347R1329	CAUCAUAUGAACAAATGAAGCTTTTGGACT	(SEQ ID NO. 5931)
14RG4_HP1348R1330	CAUCAUAUATGAAGTCAAAATAAAAGTCC	(SEQ ID NO. 5932)
14RG5_HP1349R1331	CAUCAUAUTAAAAAATCATGGGTTTTTA	(SEQ ID NO. 5933)
14RG6_HP1350R1332	CAUCAUAUGGGTGTGTATTATAACAATGA	(SEQ ID NO. 5934)
14RG7_HP1351R1333	CAUCAUAUAGGACTCTTAATGGACTATCA	(SEQ ID NO. 5935)
14RG8_HP1352R1334	CAUCAUAUATGGATTTTAAAGAAAAC	(SEQ ID NO. 5936)
14RG9_HP1354R1335	CAUCAUAUACATGCTAAAAGAATATTAG	(SEQ ID NO. 5937)
14RG10_HP1355R1336	CAUCAUAUATGGAGATTAGAACCTTTTAA	(SEQ ID NO. 5938)
14RG11_HP1356R1337	CAUCAUAUGAATTTTCATGCCAACTGATAA	(SEQ ID NO. 5939)
14RG12_HP1357R1338	CAUCAUAUATGGCAGGGTTAAAATGGTAG	(SEQ ID NO. 5940)
14RH1_HP1358R1339	CAUCAUAUATGTTATCTTCTAGTGATTGG	(SEQ ID NO. 5941)
14RH2_HP1359R1340	CAUCAUAUATGGCTATTTTGGGGTGGTGT	(SEQ ID NO. 5942)
14RH3_HP1360R1341	CAUCAUAUCAAAATCATTTGCTTAAAAAAT	(SEQ ID NO. 5943)
14RH4_HP1361R1342	CAUCAUAUGGTGTGTGGGGTGTTTTAAAG	(SEQ ID NO. 5944)
14RH5_HP1362R1343	CAUCAUAUAATGGATCATTTTAAAGCATTT	(SEQ ID NO. 5945)
14RH6_HP1363R1344	CAUCAUAUAAAGATGCTTTTCAGTGATGA	(SEQ ID NO. 5946)
14RH7_HP1364R1345	CAUCAUAUGTTGGCTATCGCTTTAAACCCA	(SEQ ID NO. 5947)
14RH8_HP1366R1347	CAUCAUAUGATATTTGACATGCCAAAATT	(SEQ ID NO. 5948)
14RH9_HP1367R1348	CAUCAUAUTGTTTGATTTTGAATAAGATT	(SEQ ID NO. 5949)

14RH10_HP1368R1349	CAUCAUUTTGAAATATCAATAAAGTGT	(SEQ ID NO. 5950)
14RH11_HP1370R1350	CAUCAUUTTGATATAAATAAAGATGAA	(SEQ ID NO. 5951)
14RH12_HP1371R1351	CAUCAUAUAATCATGGCAAGAAAAGA	(SEQ ID NO. 5952)
15SA1_HP1372S1352	CUACUACUAATAAAGGCTAGTTTTCACA	(SEQ ID NO. 5953)
15SA2_HP1373S1353	CUACUACUAGCAATTATCTACTAAACCCAC	(SEQ ID NO. 5954)
15SA3_HP1374S1354	CUACUACUACGTGTTCCCTTAAGGAAGAATT	(SEQ ID NO. 5955)
15SA4_HP1375S1355	CUACUACUATCATGTATTCTCTCTTGT	(SEQ ID NO. 5956)
15SA5_HP1376S1356	CUACUACUATTAATCTCTCTCTGCAATCAT	(SEQ ID NO. 5957)
15SA6_HP1377S1357	CUACUACUAATCATTCATGCGTGTGGCTTA	(SEQ ID NO. 5958)
15SA7_HP1378S1358	CUACUACUACTACCAATCAAAAATTAACAC	(SEQ ID NO. 5959)
15SA8_HP1379S1359	CUACUACUATTCAAAGCAAAGTTTTTCTA	(SEQ ID NO. 5960)
15SA9_HP1380S1360	CUACUACUATACTTTACATGAACCTCCTGGA	(SEQ ID NO. 5961)
15SA10_HP1381S1361	CUACUACUAATCAAAATTTCTAAATGGCTTA	(SEQ ID NO. 5962)
15SA11_HP1382S1362	CUACUACUATTAATACTTCTTAGCGTTGTT	(SEQ ID NO. 5963)
15SA12_HP1383S1363	CUACUACUACTACCTTGCAAAAGAATTTAG	(SEQ ID NO. 5964)
15SB1_HP1384S1364	CUACUACUACCATTTTAATCCCATTTAATT	(SEQ ID NO. 5965)
15SB2_HP1385S1365	CUACUACUAGCATCATTTCTCCCTTTAAATA	(SEQ ID NO. 5966)
15SB3_HP1386S1366	CUACUACUACTTTATGCAAGAGATTGTCTG	(SEQ ID NO. 5967)
15SB4_HP1387S1367	CUACUACUAAAATCAAAATACTAGGCAACA	(SEQ ID NO. 5968)
15SB5_HP1388S1368	CUACUACUATTCAAATACCTAAACATAGGAT	(SEQ ID NO. 5969)
15SB6_HP1389S1369	CUACUACUACTTTTTCGTTAGGTTTAGAGC	(SEQ ID NO. 5970)
15SB7_HP1390S1370	CUACUACUAGATTAGAGCAAAAATTAGA	(SEQ ID NO. 5971)
15SB8_HP1391S1371	CUACUACUACTACCCACCAATATCCAACAA	(SEQ ID NO. 5972)
15SB9_HP1392S1372	CUACUACUAAAGTGTTTAAGTGTCCTTTAG	(SEQ ID NO. 5973)
15SB10_HP1393S1373	CUACUACUATCATTTCTTGCGCCTTTAATT	(SEQ ID NO. 5974)
15SB11_HP1394S1374	CUACUACUATTTTATCTTTTGTGCTAGG	(SEQ ID NO. 5975)
15SB12_HP1395S1375	CUACUACUAGCCCCCTAGAAAGTGAACACAT	(SEQ ID NO. 5976)
15SC1_HP1396S1376	CUACUACUAAAATCAACTTTCTTTCTTTT	(SEQ ID NO. 5977)
15SC2_HP1397S1377	CUACUACUACTAGAAAGTTACCGGATTGAGA	(SEQ ID NO. 5978)
15SC3_HP1398S1378	CUACUACUATCAAGCTCCTTTTAAATCTC	(SEQ ID NO. 5979)
15SC4_HP1399S1379	CUACUACUAGTTTGAAAAGCGATCAGTAAC	(SEQ ID NO. 5980)
15SC5_HP1400S1380	CUACUACUAGCCTTTAGAAAGTGTAGTTC	(SEQ ID NO. 5981)

15SC6_HP1401S1381	CUACUACUACATTTAAGAACGCTCCAATA	(SEQ ID NO. 5982)
15SC7_HP1402S1382	CUACUACUATTAATGATACACTCGTCTATGTG	(SEQ ID NO. 5983)
15SC8_HP1403S1383	CUACUACUATCACCCCATTAACCCCAAATC	(SEQ ID NO. 5984)
15SC9_HP1404S1384	CUACUACUATCAAAGAATGGCACAATCTCC	(SEQ ID NO. 5985)
15SC10_HP1405S1385	CUACUACUATCACAAACCACTTAAATTTTC	(SEQ ID NO. 5986)
15SC11_HP1406S1386	CUACUACUAAAAAAGTTCTCTCATTAATGA	(SEQ ID NO. 5987)
15SC12_HP1407S1387	CUACUACUACTTTTTCATCAAGTTTCTTTT	(SEQ ID NO. 5988)
15SD1_HP1408S1388	CUACUACUATGGGGCTTATCGAATCAAAAT	(SEQ ID NO. 5989)
15SD2_HP1409S1389	CUACUACUATTTAATCATCTCTAGATCAAAA	(SEQ ID NO. 5990)
15SD3_HP1410S1390	CUACUACUATTCCTCATGCCGCCAGCTTG	(SEQ ID NO. 5991)
15SD4_HP1411S1391	CUACUACUATGTTGGGGTGTGAATTTTATT	(SEQ ID NO. 5992)
15SD5_HP1412S1392	CUACUACUAGGGGGGGTTTATTCTACATT	(SEQ ID NO. 5993)
15SD6_HP1413S1393	CUACUACUACGTTATTTTCGCATTCAAAAGG	(SEQ ID NO. 5994)
15SD7_HP1414S1394	CUACUACUATTAGCGGTTTGTGATAAGGAAG	(SEQ ID NO. 5995)
15SD8_HP1415S1395	CUACUACUAAAGTTTGTGTATCCATTAGAT	(SEQ ID NO. 5996)
15SD9_HP1416S1396	CUACUACUAAATGTCCTTTAAGAGAGTTTGA	(SEQ ID NO. 5997)
15SD10_HP1418S1397	CUACUACUACCCTATCTCAAAATCTTCACT	(SEQ ID NO. 5998)
15SD11_HP1419S1398	CUACUACUATTTCTAGCCGATGATTTTGGG	(SEQ ID NO. 5999)
15SD12_HP1420S1399	CUACUACUATTCATGATATTCCTTTTATC	(SEQ ID NO. 6000)
15SE1_HP1421S1400	CUACUACUAGCATTTAAAGCTCTTTAGTCC	(SEQ ID NO. 6001)
15SE2_HP1422S1401	CUACUACUAAATCCTTTTATCATCGCTCTTT	(SEQ ID NO. 6002)
15SE3_HP1423S1402	CUACUACUAGTCTTTTATTCTTTTGTTTAG	(SEQ ID NO. 6003)
15SE4_HP1424S1403	CUACUACUACACTTCATGCTTTTATFGTTCC	(SEQ ID NO. 6004)
15SE5_HP1425S1404	CUACUACUATTAATAAACGATAAACATAATC	(SEQ ID NO. 6005)
15SE6_HP1426S1405	CUACUACUACTATAATAAATACCGATGAAAA	(SEQ ID NO. 6006)
15SE7_HP1428S1407	CUACUACUATCAAAATTTGCTGAGAGAGTTT	(SEQ ID NO. 6007)
15SE8_HP1429S1408	CUACUACUATCATGCTTTTAAGCCCTAATTC	(SEQ ID NO. 6008)
15SE9_HP1430S1409	CUACUACUATCAAAAAGAATGGGCATGACA	(SEQ ID NO. 6009)
15SE10_HP1431S1410	CUACUACUACATTAGCCTTTTAAAGGTAA	(SEQ ID NO. 6010)
15SE11_HP1432S1411	CUACUACUACCACAAACGCCCCAATCAATA	(SEQ ID NO. 6011)
15SE12_HP1433S1412	CUACUACUAAAAAATCACTCCCTTAAAAAC	(SEQ ID NO. 6012)
15SF1_HP1434S1413	CUACUACUATCAAAACACACCCTTTTATT	(SEQ ID NO. 6013)

15SF2_HP1435S1414	CUACUACUACATCTTTATCTCATTAATAA	(SEQ ID NO. 6014)
15SF3_HP1436S1415	CUACUACUACAAATCTAAAAACCTCTTCG	(SEQ ID NO. 6015)
15SF4_HP1437S1416	CUACUACUACTACAAATTGATTGTTGTGA	(SEQ ID NO. 6016)
15SF5_HP1438S1417	CUACUACUAGATTATCTGTAAAGTTGAA	(SEQ ID NO. 6017)
15SF6_HP1439S1418	CUACUACUACCTAAACAACCTTTCTAGCAT	(SEQ ID NO. 6018)
15SF7_HP1440S1419	CUACUACUATTAGGGAATGTTTGGGAAAT	(SEQ ID NO. 6019)
15SF8_HP1441S1420	CUACUACUATTATAGAGAAGAGCTAAACAC	(SEQ ID NO. 6020)
15SF9_HP1442S1421	CUACUACUAAATGCGTCAAGGCTTAATGACC	(SEQ ID NO. 6021)
15SF10_HP1443S1422	CUACUACUATGAGTTTCATTCGCCCCCTTT	(SEQ ID NO. 6022)
15SF11_HP1444S1423	CUACUACUACTACCATTCTCTTCATTATTA	(SEQ ID NO. 6023)
15SF12_HP1445S1424	CUACUACUATTAGGCTTTGCTATATAATCTC	(SEQ ID NO. 6024)
15SG1_HP1446S1425	CUACUACUACTAAACTAATTTTTTTGATT	(SEQ ID NO. 6025)
15SG2_HP1447S1426	CUACUACUAAAGGTTTAGACGGGAAAGCTTT	(SEQ ID NO. 6026)
15SG3_HP1448S1427	CUACUACUATTATTGTTTTCGCATAGGTATG	(SEQ ID NO. 6027)
15SG4_HP1449S1428	CUACUACUATGTGATTAAACCTTAATGATG	(SEQ ID NO. 6028)
15SG5_HP1450S1429	CUACUACUATTGTCATCAATGTTCCCTTTT	(SEQ ID NO. 6029)
15SG6_HP1451S1430	CUACUACUATCATTCATTGTTTAAAGTCGTT	(SEQ ID NO. 6030)
15SG7_HP1452S1431	CUACUACUATTTCATTGTCCTAAGCAAAATT	(SEQ ID NO. 6031)
15SG8_HP1453S1432	CUACUACUATTAGAAAAATCCACCCGTAATT	(SEQ ID NO. 6032)
15SG9_HP1454S1433	CUACUACUAACTCTGCTTATAACCCCGTAT	(SEQ ID NO. 6033)
15SG10_HP1455S1434	CUACUACUATTTCATTATTAACTCTTACTC	(SEQ ID NO. 6034)
15SG11_HP1456S1435	CUACUACUACCTACTTTTTTAACCATGCCCA	(SEQ ID NO. 6035)
15SG12_HP1457S1436	CUACUACUATAAATTTAAACATACGCTTA	(SEQ ID NO. 6036)
15SH1_HP1458S1437	CUACUACUAGATACCCCTTACAATAACGCT	(SEQ ID NO. 6037)
15SH2_HP1459S1438	CUACUACUAAAGCTAATCCCTTTAACATT	(SEQ ID NO. 6038)
15SH3_HP1460S1439	CUACUACUACTCAAGCTAAATCCCTCCACT	(SEQ ID NO. 6039)
15SH4_HP1461S1440	CUACUACUATAAATCAAAAAGAGGGTTTAG	(SEQ ID NO. 6040)
15SH5_HP1462S1441	CUACUACUAACTCAAGGCGTTTTCAAATAA	(SEQ ID NO. 6041)
15SH6_HP1463S1442	CUACUACUATTTTATTATTTTTTAACGGGCT	(SEQ ID NO. 6042)
15SH7_HP1464S1443	CUACUACUATTATTCTCTTCTCCAAAAAT	(SEQ ID NO. 6043)
15SH8_HP1465S1444	CUACUACUACCCGCGATTAAAGTGTAATT	(SEQ ID NO. 6044)
15SH9_HP1466S1445	CUACUACUAGTTAGTAGCGTTTCATTATATG	(SEQ ID NO. 6045)

15SH10_HP1467S1446	CUACUACUAAAAAGGTTAAATTTATAGCT	(SEQ ID NO. 6046)
15SH11_HP1468S1447	CUACUACUATTAGCCAACTTCAAAAATCCA	(SEQ ID NO. 6047)
15SH12_HP1469S1448	CUACUACUAGGTTAAAAATCCCTCAAGTAA	(SEQ ID NO. 6048)
15RA1_HP1372R1352	CAUCAUCAUGCATGCGTTTTTTATTTTAAAT	(SEQ ID NO. 6049)
15RA2_HP1373R1353	CAUCAUCAUGGCATGATTTTGTAGCAAAATG	(SEQ ID NO. 6050)
15RA3_HP1374R1354	CAUCAUCAUAGAGGAATAACATGAACGAAA	(SEQ ID NO. 6051)
15RA4_HP1375R1355	CAUCAUCAUAGAGAGAGATTAAAAAATGAG	(SEQ ID NO. 6052)
15RA5_HP1376R1356	CAUCAUCAUATGGAACAAAGCCATCAAAAC	(SEQ ID NO. 6053)
15RA6_HP1377R1357	CAUCAUCAUATGTCTTTTAAGGAGAAGATTT	(SEQ ID NO. 6054)
15RA7_HP1378R1358	CAUCAUCAUATGCGTTTAAACATTTTAA	(SEQ ID NO. 6055)
15RA8_HP1379R1359	CAUCAUCAUAAATGACTGAAGATTTTCCTA	(SEQ ID NO. 6056)
15RA9_HP1380R1360	CAUCAUCAUGGCTTATGGGGGAGTTTAG	(SEQ ID NO. 6057)
15RA10_HP1381R1361	CAUCAUCAUTTTAGGGGTGCGAGGAGCGAA	(SEQ ID NO. 6058)
15RA11_HP1382R1362	CAUCAUCAUATGACCAATATCACCCCTGAA	(SEQ ID NO. 6059)
15RA12_HP1383R1363	CAUCAUCAUGTGTTTTGGCTTCAGGGGTG	(SEQ ID NO. 6060)
15RB1_HP1384R1364	CAUCAUCAUAGGGAGAATGATGCAAAAATAG	(SEQ ID NO. 6061)
15RB2_HP1385R1365	CAUCAUCAUAGGGTTTTTATGGATTACAAA	(SEQ ID NO. 6062)
15RB3_HP1386R1366	CAUCAUCAUAGTATTTTGAAGTAGCTCCG	(SEQ ID NO. 6063)
15RB4_HP1387R1367	CAUCAUCAUGGGGCGTGAATGATAAAAAT	(SEQ ID NO. 6064)
15RB5_HP1388R1368	CAUCAUCAUCACATGAATAATTTGGTTT	(SEQ ID NO. 6065)
15RB6_HP1389R1369	CAUCAUCAUTATGATGACAGAGAAACCTA	(SEQ ID NO. 6066)
15RB7_HP1390R1370	CAUCAUCAUACCAATGAGCGAACCATTAGA	(SEQ ID NO. 6067)
15RB8_HP1391R1371	CAUCAUCAUGGTTAGCATGGGTGTTCCGC	(SEQ ID NO. 6068)
15RB9_HP1392R1372	CAUCAUCAUATGAAATTTTCTTTTAAAG	(SEQ ID NO. 6069)
15RB10_HP1393R1373	CAUCAUCAUAAACATGCGAGATTCAATAAC	(SEQ ID NO. 6070)
15RB11_HP1394R1374	CAUCAUCAUATGAAAGATTCACTTCAAACT	(SEQ ID NO. 6071)
15RB12_HP1395R1375	CAUCAUCAUCACATGAAAAAATTTTCT	(SEQ ID NO. 6072)
15RC1_HP1396R1376	CAUCAUCAUAAATGGAAAAAGAGCTCGTTAC	(SEQ ID NO. 6073)
15RC2_HP1397R1377	CAUCAUCAUGGGTTTTTATGGCAAAAATTG	(SEQ ID NO. 6074)
15RC3_HP1398R1378	CAUCAUCAUCATGACTATTGGGCTAGTTAA	(SEQ ID NO. 6075)
15RC4_HP1399R1379	CAUCAUCAUATAAAATGATTTTAGTAGGAT	(SEQ ID NO. 6076)
15RC5_HP1400R1380	CAUCAUCAUAGGAGTTTGTGTGCATAAAA	(SEQ ID NO. 6077)

15RC6_HP1401R1381	CAUCAUCAAATGAACGCTTATTGTTGAC	(SEQ ID NO. 6078)
15RC7_HP1402R1382	CAUCAUCAUTATGATGAAAACAGAAAAAGA	(SEQ ID NO. 6079)
15RC8_HP1403R1383	CAUCAUCAUGTTAAATGGCGATCAAAAAA	(SEQ ID NO. 6080)
15RC9_HP1404R1384	CAUCAUCAUGGGTTAATGGGGTGACAGAAC	(SEQ ID NO. 6081)
15RC10_HP1405R1385	CAUCAUCAUAAAAATGCCCTATGAATATAAG	(SEQ ID NO. 6082)
15RC11_HP1406R1386	CAUCAUCAUATTATGCAAGAGATTTTTTTA	(SEQ ID NO. 6083)
15RC12_HP1407R1387	CAUCAUCAUGCTGTCTATTAAATGAGAGAACT	(SEQ ID NO. 6084)
15RD1_HP1408R1388	CAUCAUCAUATACCCCATGTCTCTTTTTT	(SEQ ID NO. 6085)
15RD2_HP1409R1389	CAUCAUCAUATGATGGCAAAAATAGATGTA	(SEQ ID NO. 6086)
15RD3_HP1410R1390	CAUCAUCAUATGCCCTAAAAAGAGCTATTA	(SEQ ID NO. 6087)
15RD4_HP1411R1391	CAUCAUCAUATGTTATTGGATTATGATTTT	(SEQ ID NO. 6088)
15RD5_HP1412R1392	CAUCAUCAUATGGGTTTTCAAAAATGAAAAT	(SEQ ID NO. 6089)
15RD6_HP1413R1393	CAUCAUCAUATGACCCCTGAACTAAACCTC	(SEQ ID NO. 6090)
15RD7_HP1414R1394	CAUCAUCAUCATGAACCAACGCATAGAAAC	(SEQ ID NO. 6091)
15RD8_HP1415R1395	CAUCAUCAUCTTTGAGTATTATATAAGACA	(SEQ ID NO. 6092)
15RD9_HP1416R1396	CAUCAUCAUCTAATGGATACACAAACTTA	(SEQ ID NO. 6093)
15RD10_HP1418R1397	CAUCAUCAUATGCTAGAAACCCCATGTA	(SEQ ID NO. 6094)
15RD11_HP1419R1398	CAUCAUCAUGGAATATCATGGAATCACAAAC	(SEQ ID NO. 6095)
15RD12_HP1420R1399	CAUCAUCAUATGCCCTTAAATCCTTAAAA	(SEQ ID NO. 6096)
15RE1_HP1421R1400	CAUCAUCAUAGGGCTTTTGAAAACTTTACA	(SEQ ID NO. 6097)
15RE2_HP1422R1401	CAUCAUCAUTCAGTGGAGAAATACAAAGAC	(SEQ ID NO. 6098)
15RE3_HP1423R1402	CAUCAUCAUCATGCGAATAGACAAATTTT	(SEQ ID NO. 6099)
15RE4_HP1424R1403	CAUCAUCAUATTTGTTTGAAGTTTCAAATT	(SEQ ID NO. 6100)
15RE5_HP1425R1404	CAUCAUCAUGTAATATGTTAGCGCAATTAG	(SEQ ID NO. 6101)
15RE6_HP1426R1405	CAUCAUCAUTCTATGCTAGGGTTTAACTTT	(SEQ ID NO. 6102)
15RE7_HP1428R1407	CAUCAUCAUTAAAGCATGAAAGCTAGTATT	(SEQ ID NO. 6103)
15RE8_HP1429R1408	CAUCAUCAUATGCCCATCTTTTGTGATTGT	(SEQ ID NO. 6104)
15RE9_HP1430R1409	CAUCAUCAUTATGACGGATAACAACCAAAA	(SEQ ID NO. 6105)
15RE10_HP1431R1410	CAUCAUCAUTTATGTTAGTAGCTAAAAAGT	(SEQ ID NO. 6106)
15RE11_HP1432R1411	CAUCAUCAUGAGCTAGAAATTTAAATTTCAA	(SEQ ID NO. 6107)
15RE12_HP1433R1412	CAUCAUCAUATGCTAAGCTATAAGCATTCT	(SEQ ID NO. 6108)
15RF1_HP1434R1413	CAUCAUCAUTGAGATAAAAGATGTTAGAAAT	(SEQ ID NO. 6109)

15RF2_HP1435R1414	CAUCAUAUATGTGGAGTTTCATTCAAAA	(SEQ ID NO. 6110)
15RF3_HP1436R1415	CAUCAUAUATGGCGTGTAAATTTTGCCCC	(SEQ ID NO. 6111)
15RF4_HP1437R1416	CAUCAUAUATGAGTGAAACATTAAGGA	(SEQ ID NO. 6112)
15RF5_HP1438R1417	CAUCAUAUGCATGTTTTTTTAAACTTATC	(SEQ ID NO. 6113)
15RF6_HP1439R1418	CAUCAUAUATGGACAATAGCACAGACAGA	(SEQ ID NO. 6114)
15RF7_HP1440R1419	CAUCAUAUATGGCGTTTTTGGCATAAAGA	(SEQ ID NO. 6115)
15RF8_HP1441R1420	CAUCAUAUTTTATGATGGATCAATATAA	(SEQ ID NO. 6116)
15RF9_HP1442R1421	CAUCAUAUAAAGAGATTAAACATGCTCAT	(SEQ ID NO. 6117)
15RF10_HP1443R1422	CAUCAUAUCTTGACGCATGTTTTTGAAGT	(SEQ ID NO. 6118)
15RF11_HP1444R1423	CAUCAUAUAAAAGGGGCGAATGAAACT	(SEQ ID NO. 6119)
15RF12_HP1445R1424	CAUCAUAUATGAAAGAAATGGTAGATTAT	(SEQ ID NO. 6120)
15RG1_HP1446R1425	CAUCAUAUGAGCGGTGAAAAAAGTAGAAT	(SEQ ID NO. 6121)
15RG2_HP1447R1426	CAUCAUAUTTTTAAATGAAACGCACCTTAC	(SEQ ID NO. 6122)
15RG3_HP1448R1427	CAUCAUAUATAATGCCAGACGAGCTAAGGG	(SEQ ID NO. 6123)
15RG4_HP1449R1428	CAUCAUAUTACCTATGCGAACAATAAAA	(SEQ ID NO. 6124)
15RG5_HP1450R1429	CAUCAUAUATGGATAAAAAACAATAAAT	(SEQ ID NO. 6125)
15RG6_HP1451R1430	CAUCAUAUTGATGCAAAATTTTATTGAAA	(SEQ ID NO. 6126)
15RG7_HP1452R1431	CAUCAUAUATGAAAAATACATCGTCATCA	(SEQ ID NO. 6127)
15RG8_HP1453R1432	CAUCAUAUGACCATTAAAGGAGATTTTATG	(SEQ ID NO. 6128)
15RG9_HP1454R1433	CAUCAUAUGAGTAAGGATTAAATAATGAAA	(SEQ ID NO. 6129)
15RG10_HP1455R1434	CAUCAUAUGATAAGCAAAATTTGTGGATAAA	(SEQ ID NO. 6130)
15RG11_HP1456R1435	CAUCAUAUAACAATGAAAAAATCAAGTTAA	(SEQ ID NO. 6131)
15RG12_HP1457R1436	CAUCAUCAUATTATGTTATTGAAAAACAAA	(SEQ ID NO. 6132)
15RH1_HP1458R1437	CAUCAUAUATGTCAGAAATGATTAAACGGG	(SEQ ID NO. 6133)
15RH2_HP1459R1438	CAUCAUAUAGTGGAGGGATTTAGCTTGAG	(SEQ ID NO. 6134)
15RH3_HP1460R1439	CAUCAUAUGTTAGACAAATGAAAGAGAATA	(SEQ ID NO. 6135)
15RH4_HP1461R1440	CAUCAUAUTCATCATGAAAAAATCCATT	(SEQ ID NO. 6136)
15RH5_HP1462R1441	CAUCAUAUAAATGTTTGATAAAAAAATTTTC	(SEQ ID NO. 6137)
15RH6_HP1463R1442	CAUCAUAUAAATAATCATGAGAGCTACGG	(SEQ ID NO. 6138)
15RH7_HP1464R1443	CAUCAUAUTTGAAAGGCATGTGAATTAC	(SEQ ID NO. 6139)
15RH8_HP1465R1444	CAUCAUAUAACATAATAATGAACGCTACTA	(SEQ ID NO. 6140)
15RH9_HP1466R1445	CAUCAUAUTTTAATGAAGACAGAGAAACA	(SEQ ID NO. 6141)

15RH10_HP1467R1446	CAUCAUAUAATGTTTAAAAAATCATTTT	(SEQ ID NO. 6142)
15RH11_HP1468R1447	CAUCAUGGTGTGAAAAATGGCAAATTA	(SEQ ID NO. 6143)
15RH12_HP1469R1448	CAUCAUAUCTGAATGTTGAAAAAGAAATGAT	(SEQ ID NO. 6144)
16SA1_HP1470S1449	CUACUACUACTAACCTTTTAAATTCATTCCA	(SEQ ID NO. 6145)
16SA2_HP1471S1450	CUACUACUAAACCCCTTTTAAATAAACGAGT	(SEQ ID NO. 6146)
16SA3_HP1472S1451	CUACUACUATATCGCTTTGGGGCATTGG	(SEQ ID NO. 6147)
16SA4_HP1473S1452	CUACUACUAAAAATAAAATTAATACTCATTT	(SEQ ID NO. 6148)
16SA5_HP1474S1453	CUACUACUAGGTAAACACAGCGCATTTTATA	(SEQ ID NO. 6149)
16SA6_HP1475S1454	CUACUACUACCTTCTAACACACACATACATT	(SEQ ID NO. 6150)
16SA7_HP1476S1455	CUACUACUATCAGTTTCATTCCTCCCATCGTGG	(SEQ ID NO. 6151)
16SA8_HP1477S1456	CUACUACUATTTTCATGAATGTCCTTTATAA	(SEQ ID NO. 6152)
16SA9_HP1478S1457	CUACUACUATCAAAACCCGTTATCCACTTT	(SEQ ID NO. 6153)
16SA10_HP1479S1458	CUACUACUATCAAAATCCATCATTTCTAAAA	(SEQ ID NO. 6154)
16SA11_HP1480S1459	CUACUACUAGCCTTAAAGGTAATTTTCTTAA	(SEQ ID NO. 6155)
16SA12_HP1481S1460	CUACUACUATCAACCTCTTTAATCGTTCT	(SEQ ID NO. 6156)
16SB1_HP1482S1461	CUACUACUACTTTAAGCCTTTGGTCTGGC	(SEQ ID NO. 6157)
16SB2_HP1483S1462	CUACUACUAACTTCCTTTAGTTTTTTTTTA	(SEQ ID NO. 6158)
16SB3_HP1484S1463	CUACUACUATTAATAAGGCTTGACAAACCAC	(SEQ ID NO. 6159)
16SB4_HP1485S1464	CUACUACUATCCCTAATTTATCTTATTTTG	(SEQ ID NO. 6160)
16SB5_HP1486S1465	CUACUACUATGAGATTTTAAAGCGTTTCA	(SEQ ID NO. 6161)
16SB6_HP1487S1466	CUACUACUAAAAAATTCATGCACCTAGCC	(SEQ ID NO. 6162)
16SB7_HP1488S1467	CUACUACUATTTTAAGGTTTAAATGGTAACT	(SEQ ID NO. 6163)
16SB8_HP1489S1468	CUACUACUACCTTAATAAACAATTCATAA	(SEQ ID NO. 6164)
16SB9_HP1490S1469	CUACUACUATCATGCTTCATTTTCTCCCTG	(SEQ ID NO. 6165)
16SB10_HP1491S1470	CUACUACUAAAAACCCCTAGAAATACTTTCT	(SEQ ID NO. 6166)
16SB11_HP1492S1471	CUACUACUACCTTAAAGCTTATCAAACTCC	(SEQ ID NO. 6167)
16SB12_HP1493S1472	CUACUACUATCATTTCTTTAAGCCTTATTGG	(SEQ ID NO. 6168)
16SC1_HP1494S1473	CUACUACUATGTTTTTATCCTTGTTTAAAT	(SEQ ID NO. 6169)
16SC2_HP1495S1474	CUACUACUAAAAACCTTTAAAAATCAAAAAC	(SEQ ID NO. 6170)
16SC3_HP1496S1475	CUACUACUATCACCTTCGCTTTAATCACACC	(SEQ ID NO. 6171)
16SC4_HP1497S1476	CUACUACUATTTTGATAGAGTGCAATTAAC	(SEQ ID NO. 6172)
16SC5_HP1498S1477	CUACUACUAAATAAATCCTACAACTCTTAT	(SEQ ID NO. 6173)

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16SC6_HP1499S1478	CUACUACUATTAGCACATGGTGGTTGAGTT	(SEQ ID NO. 6174)
16SC7_HP1500S1479	CUACUACUACAATCAAAATAAAGAATTGAA	(SEQ ID NO. 6175)
16SC8_HP1501S1480	CUACUACUACTACCAAACTTAAAAAAGTATA	(SEQ ID NO. 6176)
16SC9_HP1502S1481	CUACUACUATGAAACGCTCTTAAACAAACC	(SEQ ID NO. 6177)
16SC10_HP1503S1482	CUACUACUAGGTTTGTTTAAGAGCGTTTCA	(SEQ ID NO. 6178)
16SC11_HP1504S1483	CUACUACUAAAAGGCGCTAGTTTAGAAGCG	(SEQ ID NO. 6179)
16SC12_HP1505S1484	CUACUACUATCTTAAAGAGTTTCTATCCAT	(SEQ ID NO. 6180)
16SD1_HP1506S1485	CUACUACUAAAGTCTCATGATGGGAAAAAAG	(SEQ ID NO. 6181)
16SD2_HP1507S1486	CUACUACUACTAGCGTTCAATCACTTCATA	(SEQ ID NO. 6182)
16SD3_HP1508S1487	CUACUACUAGCTTCAATCCTCAGTTGGTGC	(SEQ ID NO. 6183)
16SD4_HP1509S1488	CUACUACUATCATAAGACTTTCTTTTCCTT	(SEQ ID NO. 6184)
16SD5_HP1510S1489	CUACUACUAGGCTAAAGATTGCTTTTCATAG	(SEQ ID NO. 6185)
16SD6_HP1511S1490	CUACUACUATTACTAGCGGCTGAATCAAG	(SEQ ID NO. 6186)
16SD7_HP1512S1491	CUACUACUATTTCATTTTAGAACTGATAGGA	(SEQ ID NO. 6187)
16SD8_HP1513S1492	CUACUACUACGAATTTTAAAGCTTTATTAA	(SEQ ID NO. 6188)
16SD9_HP1514S1493	CUACUACUATTAATTCCTTAAACAAAGACTC	(SEQ ID NO. 6189)
16SD10_HP1515S1494	CUACUACUACTTGAAAAAACTATCGTTTGAT	(SEQ ID NO. 6190)
16SD11_HP1516S1495	CUACUACUATTAATTTGTTCTGTGCAATA	(SEQ ID NO. 6191)
16SD12_HP1517S1496	CUACUACUAAATTCAGTCCCTCTTCAATG	(SEQ ID NO. 6192)
16SE1_HP1518S1497	CUACUACUATTAATTCCTTACATCGCTTAA	(SEQ ID NO. 6193)
16SE2_HP1519S1498	CUACUACUATTAATAATTTTGACTTTCTCCAA	(SEQ ID NO. 6194)
16SE3_HP1520S1499	CUACUACUATCAACAAGATTGTGAAGATA	(SEQ ID NO. 6195)
16SE4_HP1521S1500	CUACUACUACTCTAATCTTTACGATTTAAA	(SEQ ID NO. 6196)
16SE5_HP1523S1501	CUACUACUATTTCAATTTTCAAAATGTTCCC	(SEQ ID NO. 6197)
16SE6_HP1524S1502	CUACUACUAAACACTTTAATACTTCTCTGTTG	(SEQ ID NO. 6198)
16SE7_HP1525S1503	CUACUACUAGGTTGGAATTAGTTTAAAGGT	(SEQ ID NO. 6199)
16SE8_HP1526S1504	CUACUACUATTAATACTAATTCCAACCCTAC	(SEQ ID NO. 6200)
16SE9_HP1527S1505	CUACUACUACCACCATCTTAAACTTCGTTG	(SEQ ID NO. 6201)
16SE10_HP1528S1506	CUACUACUACTATAACCTATTATGACTTT	(SEQ ID NO. 6202)
16SE11_HP1529S1507	CUACUACUACCTTTTTCATTCACTTGAAT	(SEQ ID NO. 6203)
16SE12_HP1530S1508	CUACUACUATTAATAATTATTAACATCAAT	(SEQ ID NO. 6204)
16SF1_HP1531S1509	CUACUACUACACACATTTTAAACACCAATA	(SEQ ID NO. 6205)

16SF2_HP1532S1510	CUACUACUACTTTTATTCCACGGTAACGC	(SEQ ID NO. 6206)
16SF3_HP1533S1511	CUACUACUAACTAATGCTTCAACAATCTT	(SEQ ID NO. 6207)
16SF4_HP1534S1512	CUACUACUAAACCGCTAAAGCGATTGGGCTT	(SEQ ID NO. 6208)
16SF5_HP1535S1513	CUACUACUAAATAACCTTGATTTCCTATAT	(SEQ ID NO. 6209)
16SF6_HP1536S1514	CUACUACUACACTAAAGATATTGGGATTT	(SEQ ID NO. 6210)
16SF7_HP1537S1515	CUACUACUAGCTCTCTTAAATGTGGTTGG	(SEQ ID NO. 6211)
16SF8_HP1539S1516	CUACUACUAAATCTTAAACTCTTTCATCTAA	(SEQ ID NO. 6212)
16SF9_HP1540S1517	CUACUACUATTACGCTTTAGCCATCATTTT	(SEQ ID NO. 6213)
16SF10_HP1541S1518	CUACUACUATTAAACGCCGCTTTAAAGAAAT	(SEQ ID NO. 6214)
16SF11_HP1542S1519	CUACUACUACCTATTTTATTTCATTTTCT	(SEQ ID NO. 6215)
16SF12_HP1543S1520	CUACUACUAGCTCCCCCTTTATTTTGTGC	(SEQ ID NO. 6216)
16SG1_HP1544S1521	CUACUACUATAAAATCCTTACTGGCTTATG	(SEQ ID NO. 6217)
16SG2_HP1545S1522	CUACUACUAGCATCAATCCCTCTCTCTTG	(SEQ ID NO. 6218)
16SG3_HP1546S1523	CUACUACUAGGCTATTTTTCATTATTGAAT	(SEQ ID NO. 6219)
16SG4_HP1547S1524	CUACUACUAAAGCCCTCATGCGATAACAAA	(SEQ ID NO. 6220)
16SG5_HP1548S1525	CUACUACUACCATCACTACCCCTTAATCCG	(SEQ ID NO. 6221)
16SG6_HP1549S1526	CUACUACUACATAGAAACTCTTAAACTTG	(SEQ ID NO. 6222)
16SG7_HP1550S1527	CUACUACUACCTCCTAAGCTCTTTTATTCA	(SEQ ID NO. 6223)
16SG8_HP1551S1528	CUACUACUACGTTAAAGTTTCATTCAGT	(SEQ ID NO. 6224)
16SG9_HP1552S1529	CUACUACUAAAGCATTTTTCAGCTATTCTTT	(SEQ ID NO. 6225)
16SG10_HP1553S1530	CUACUACUATTCAGACCCATAATTTTCAA	(SEQ ID NO. 6226)
16SG11_HP1554S1531	CUACUACUAGACATATTTCGGCTCCTTGAG	(SEQ ID NO. 6227)
16SG12_HP1555S1532	CUACUACUATTTCTAAACCTCACCTTCATT	(SEQ ID NO. 6228)
16SH1_HP1556S1533	CUACUACUATTATTTTATCTTAAAGCGGTT	(SEQ ID NO. 6229)
16SH2_HP1557S1534	CUACUACUACTAGATCTGCGTTCTTAAAG	(SEQ ID NO. 6230)
16SH3_HP1558S1535	CUACUACUACGTTTCATGTTTGTAAACATGCC	(SEQ ID NO. 6231)
16SH4_HP1559S1536	CUACUACUATTCCTTAACTATAAATCTT	(SEQ ID NO. 6232)
16SH5_HP1560S1537	CUACUACUATGTTTTCAGCTTTCGTGTAT	(SEQ ID NO. 6233)
16SH6_HP1563S1540	CUACUACUACCGATTAAAGCTTAATGGAAT	(SEQ ID NO. 6234)
16SH7_HP1564S1541	CUACUACUAGCTTAAAGCCGGGATAATC	(SEQ ID NO. 6235)
16SH8_HP1565S1542	CUACUACUATTAAAGATAGCCCAAGCTCATA	(SEQ ID NO. 6236)
16SH9_HP1566S1543	CUACUACUATTATAGCGAAGATTTTTCATA	(SEQ ID NO. 6237)

16SH10_HP1567S1544	CUACUACUAGCGGCTTATAATGGGTTAGTG	(SEQ ID NO. 6238)
16SH11_HP1568S1545	CUACUACUATCATGTTTTCGCCTTCTT	(SEQ ID NO. 6239)
16SH12_HP1569S1546	CUACUACUACGCATTAATAAACCTCCTTGA	(SEQ ID NO. 6240)
16RA1_HP1470R1449	CAUCAUCAUAAGAGGGTTGAATGATGGAGC	(SEQ ID NO. 6241)
16RA2_HP1471R1450	CAUCAUCAUGTGTGTCAAGTAAGAAAAATT	(SEQ ID NO. 6242)
16RA3_HP1472R1451	CAUCAUCAUATGAATAAAGTTCAATCTATT	(SEQ ID NO. 6243)
16RA4_HP1473R1452	CAUCAUCAUAATGCGCTGTTTAAACCTGTTT	(SEQ ID NO. 6244)
16RA5_HP1474R1453	CAUCAUCAUCTTAAATGTATGTGTGTTA	(SEQ ID NO. 6245)
16RA6_HP1475R1454	CAUCAUCAUGATGCAAAAAAATCGGCATTTA	(SEQ ID NO. 6246)
16RA7_HP1476R1455	CAUCAUCAUCGCAAACTTTATAAAGGACAT	(SEQ ID NO. 6247)
16RA8_HP1477R1456	CAUCAUCAUTTTTGAAAAATTTTAATCCTTT	(SEQ ID NO. 6248)
16RA9_HP1478R1457	CAUCAUCAUAGTTTTTAGAATGATGGATTT	(SEQ ID NO. 6249)
16RA10_HP1479R1458	CAUCAUCAUGGCTAGTTTGTGCTGAATGAA	(SEQ ID NO. 6250)
16RA11_HP1480R1459	CAUCAUCAUAGGGTTGAATGATTGATAGAA	(SEQ ID NO. 6251)
16RA12_HP1481R1460	CAUCAUCAUCTTAAAGCATGCGAGTGTG	(SEQ ID NO. 6252)
16RB1_HP1482R1461	CAUCAUCAUAATGTTTATGCAAGATGAATTA	(SEQ ID NO. 6253)
16RB2_HP1483R1462	CAUCAUCAUATGAAAAAAGAAAAGCATCTC	(SEQ ID NO. 6254)
16RB3_HP1484R1463	CAUCAUCAUTGTTATGGGATTTTGAATGG	(SEQ ID NO. 6255)
16RB4_HP1485R1464	CAUCAUCAUGTGAAAACGCTTAAAAATCTC	(SEQ ID NO. 6256)
16RB5_HP1486R1465	CAUCAUCAUGGCTAGTGCATGAATTTTTT	(SEQ ID NO. 6257)
16RB6_HP1487R1466	CAUCAUCAUGGATTGTTTGTTCAGATTGA	(SEQ ID NO. 6258)
16RB7_HP1488R1467	CAUCAUCAUATGTCAAATAGCATGTTGGAT	(SEQ ID NO. 6259)
16RB8_HP1489R1468	CAUCAUCAUAAGCATGAAAAAACAACCCCT	(SEQ ID NO. 6260)
16RB9_HP1490R1469	CAUCAUCAUATGGGAGGAATCAAGGAGCT	(SEQ ID NO. 6261)
16RB10_HP1491R1470	CAUCAUCAUCGATATGGAAATTAATAACAT	(SEQ ID NO. 6262)
16RB11_HP1492R1471	CAUCAUCAUGAGTTTAAAAAATGATAGAA	(SEQ ID NO. 6263)
16RB12_HP1493R1472	CAUCAUCAUGCATGCAAAAGTTTGATTATG	(SEQ ID NO. 6264)
16RC1_HP1494R1473	CAUCAUCAUATGAAACTTAAAAAACCCCTG	(SEQ ID NO. 6265)
16RC2_HP1495R1474	CAUCAUCAUACATGCAAGAATTCAGTTTGT	(SEQ ID NO. 6266)
16RC3_HP1496R1475	CAUCAUCAUATGTTAGAAGGCGTTATTAGA	(SEQ ID NO. 6267)
16RC4_HP1497R1476	CAUCAUCAUGTTATGACGCTTTTAGTAGGT	(SEQ ID NO. 6268)
16RC5_HP1498R1477	CAUCAUCAUAGTGCCTTTGTTTAGATTGT	(SEQ ID NO. 6269)

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16RC6_HP1499R1478	CAUCAUAAGGTTTTTGATGAGTCTGT	(SEQ ID NO. 6270)
16RC7_HP1500R1479	CAUCAUTTATAATGTGTTCTAATCTT	(SEQ ID NO. 6271)
16RC8_HP1501R1480	CAUCAUGAGAGTGATGCTCAATTTTAT	(SEQ ID NO. 6272)
16RC9_HP1502R1481	CAUCAUAATGGATGCGATTATCCTTAT	(SEQ ID NO. 6273)
16RC10_HP1503R1482	CAUCAUAATAAGGATTAAAAAATGA	(SEQ ID NO. 6274)
16RC11_HP1504R1483	CAUCAUAATGGATAGAAAACTCTTAAGA	(SEQ ID NO. 6275)
16RC12_HP1505R1484	CAUCAUAATGAGACTTTATGAGAGTTA	(SEQ ID NO. 6276)
16RD1_HP1506R1485	CAUCAUGCAAGTTTGCAAGAAATTAAG	(SEQ ID NO. 6277)
16RD2_HP1507R1486	CAUCAUAAGTGTGTTGCGCACACAAAATG	(SEQ ID NO. 6278)
16RD3_HP1508R1487	CAUCAUAATGCTTGAAACTTCTAGCCAT	(SEQ ID NO. 6279)
16RD4_HP1509R1488	CAUCAUAACGATTTTAAAAAATGGCTAG	(SEQ ID NO. 6280)
16RD5_HP1510R1489	CAUCAUGAAAGTCTTATGAAAACTAAA	(SEQ ID NO. 6281)
16RD6_HP1511R1490	CAUCAUAATGAAAGCAATCTTTAGCCTC	(SEQ ID NO. 6282)
16RD7_HP1512R1491	CAUCAUAATGCTTAGAAATCAATTTCTGT	(SEQ ID NO. 6283)
16RD8_HP1513R1492	CAUCAUAACATCATCATGGCTAAAGAAAC	(SEQ ID NO. 6284)
16RD9_HP1514R1493	CAUCAUAATGAAAAAATCAGCGATCTT	(SEQ ID NO. 6285)
16RD10_HP1515R1494	CAUCAUAUCTTCTATGAGAAAAAATCATA	(SEQ ID NO. 6286)
16RD11_HP1516R1495	CAUCAUGGGCAGTGAAATGGAAGTTA	(SEQ ID NO. 6287)
16RD12_HP1517R1496	CAUCAUAATGGATTATATAAAAAATTAGAT	(SEQ ID NO. 6288)
16RE1_HP1518R1497	CAUCAUAATGATTCGTTTCGCTCACATC	(SEQ ID NO. 6289)
16RE2_HP1519R1498	CAUCAUAUTTGCAAGAATGCAGACAATTT	(SEQ ID NO. 6290)
16RE3_HP1520R1499	CAUCAUAATGGGGTTAAAAAATTATCAAT	(SEQ ID NO. 6291)
16RE4_HP1521R1500	CAUCAUAATAGGGGTAGAGGTGAAAAATC	(SEQ ID NO. 6292)
16RE5_HP1523R1501	CAUCAUAUTTGCAAGAAACAGATAAATTA	(SEQ ID NO. 6293)
16RE6_HP1524R1502	CAUCAUAUTTGATGAAATCTAAAAATCACT	(SEQ ID NO. 6294)
16RE7_HP1525R1503	CAUCAUAAGGAAGTATTAAAGTGTGAAA	(SEQ ID NO. 6295)
16RE8_HP1526R1504	CAUCAUAATGAAACTGATTTCATGGAAT	(SEQ ID NO. 6296)
16RE9_HP1527R1505	CAUCAUCATGAAAAAATCCCTTTGTCT	(SEQ ID NO. 6297)
16RE10_HP1528R1506	CAUCAUAATGCTTATTCCTTTTATTTT	(SEQ ID NO. 6298)
16RE11_HP1529R1507	CAUCAUGCCATGGATACCAACAACAAT	(SEQ ID NO. 6299)
16RE12_HP1530R1508	CAUCAUAAGGATTTTTCATGCTGCTTGC	(SEQ ID NO. 6300)
16RF1_HP1531R1509	CAUCAUAATGTTTGAATAAATACGCAAG	(SEQ ID NO. 6301)

16RF2_HP1532R1510	CAUCAUAUATGTGTGGATTGTAGTTAT	(SEQ ID NO. 6302)
16RF3_HP1533R1511	CAUCAUAUGATGTGGATCACCCAAGAAAC	(SEQ ID NO. 6303)
16RF4_HP1534R1512	CAUCAUAUTTGCTTAACGCTATCAAGTTT	(SEQ ID NO. 6304)
16RF5_HP1535R1513	CAUCAUAUGGAATGAGGAAAACCATTTAT	(SEQ ID NO. 6305)
16RF6_HP1536R1514	CAUCAUAUTTTAATGAAAAAATATTGTCTG	(SEQ ID NO. 6306)
16RF7_HP1537R1515	CAUCAUAUATGCATGCTTGAAAAAGTGTT	(SEQ ID NO. 6307)
16RF8_HP1539R1516	CAUCAUAUGAGAGTTTAAATGGCAGAGATA	(SEQ ID NO. 6308)
16RF9_HP1540R1517	CAUCAUAUTTTTTTAATCATGGCAGATATT	(SEQ ID NO. 6309)
16RF10_HP1541R1518	CAUCAUAUAATGATCCAAATCCAGCCTTTA	(SEQ ID NO. 6310)
16RF11_HP1542R1519	CAUCAUAUCAGATGGCAATCTTTGATAAC	(SEQ ID NO. 6311)
16RF12_HP1543R1520	CAUCAUAUAGTGTTTTATAGACAGGCGTTT	(SEQ ID NO. 6312)
16RG1_HP1544R1521	CAUCAUAUTTGATGCCGCAAAACCAGCTT	(SEQ ID NO. 6313)
16RG2_HP1545R1522	CAUCAUAUTGAAAAAATAGCCCTTTTGAAT	(SEQ ID NO. 6314)
16RG3_HP1546R1523	CAUCAUAUCATGAGGCTTTACTTTTTTTT	(SEQ ID NO. 6315)
16RG4_HP1547R1524	CAUCAUAUGTAGTGATGGATTTTATCAAT	(SEQ ID NO. 6316)
16RG5_HP1548R1525	CAUCAUAUATGGATTGGGGTCGGTCGTT	(SEQ ID NO. 6317)
16RG6_HP1549R1526	CAUCAUAUTTAGGAGGTTTTTATGGAATTA	(SEQ ID NO. 6318)
16RG7_HP1550R1527	CAUCAUAUGTGCCTTCTTTACTAGAAACT	(SEQ ID NO. 6319)
16RG8_HP1551R1528	CAUCAUAUAATGGGACAAATTTAAAGACAT	(SEQ ID NO. 6320)
16RG9_HP1552R1529	CAUCAUAUGTCTATGAATCTCAAAAAAAC	(SEQ ID NO. 6321)
16RG10_HP1553R1530	CAUCAUAUTCTCAATGGATACCAAAAGAC	(SEQ ID NO. 6322)
16RG11_HP1554R1531	CAUCAUAUATGGTAACCATGAAAGATTTA	(SEQ ID NO. 6323)
16RG12_HP1555R1532	CAUCAUAUAGCCGAATAATGTCAGGAATT	(SEQ ID NO. 6324)
16RH1_HP1556R1533	CAUCAUAUATGGATAATAGGAATATTGAT	(SEQ ID NO. 6325)
16RH2_HP1557R1534	CAUCAUAUGTTCTATGCAAGCCATACACA	(SEQ ID NO. 6326)
16RH3_HP1558R1535	CAUCAUAUCATGTTTTTATCTCTCTTTTGA	(SEQ ID NO. 6327)
16RH4_HP1559R1536	CAUCAUAUTTTGAAAAAAGGGTTTTATTA	(SEQ ID NO. 6328)
16RH5_HP1560R1537	CAUCAUAUATGACTACAGACAGAAATTTG	(SEQ ID NO. 6329)
16RH6_HP1563R1540	CAUCAUAUGTTACGATATGTTAGTTACAA	(SEQ ID NO. 6330)
16RH7_HP1564R1541	CAUCAUAUTTAATAAGGGGTTTTTATGA	(SEQ ID NO. 6331)
16RH8_HP1565R1542	CAUCAUAUGTATGAAAAATCTTCGCTATA	(SEQ ID NO. 6332)
16RH9_HP1566R1543	CAUCAUAUATGCTCTCTCTTTAAACAAGAT	(SEQ ID NO. 6333)

16RH10_HP1567R1544	CAUCAUCAUGAAACCATGATGTGTCATT	(SEQ ID NO. 6334)
16RH11_HP1568R1545	CAUCAUCAUATGCGTTGGTGTGTTTTTG	(SEQ ID NO. 6335)
16RH12_HP1569R1546	CAUCAUCAUCAAGATGAAGCGCTCAAGCTT	(SEQ ID NO. 6336)
17SA1_HP1570S1547	CUACUACUATAAAACGCTATTAGAGGTAAA	(SEQ ID NO. 6337)
17SA2_HP1571S1548	CUACUACUATTAATCATTTCTCTCGTTAAAA	(SEQ ID NO. 6338)
17SA3_HP1572S1549	CUACUACUACCAACCCATTAAAAATTCCT	(SEQ ID NO. 6339)
17SA4_HP1573S1550	CUACUACUAAAGCCTTATTTTAGGGGAAACT	(SEQ ID NO. 6340)
17SA5_HP1574S1551	CUACUACUATCATCTAATAACCTTAAAGTCA	(SEQ ID NO. 6341)
17SA6_HP1575S1552	CUACUACUATTCGATCACTTGGACATTG	(SEQ ID NO. 6342)
17SA7_HP1576S1553	CUACUACUATTTAATCCCTTAATTTTCC	(SEQ ID NO. 6343)
17SA8_HP1577S1554	CUACUACUAAAAACCAATCCCTAATACTTA	(SEQ ID NO. 6344)
17SA9_HP1578S1555	CUACUACUATTCCTCAACAAATAGAACTTTT	(SEQ ID NO. 6345)
17SA10_HP1579S1556	CUACUACUATAGCCTATGTTAGTTTATT	(SEQ ID NO. 6346)
17SA11_HP1580S1557	CUACUACUATATCCCTTTACCATTTGATAAG	(SEQ ID NO. 6347)
17SA12_HP1581S1558	CUACUACUAAACCTTTGAGCTTTTTCATTGA	(SEQ ID NO. 6348)
17SB1_HP1582S1559	CUACUACUATTTTATCGCTTAATGAGTTGC	(SEQ ID NO. 6349)
17SB2_HP1583S1560	CUACUACUAAATCTTTAAGCCAAATATTGA	(SEQ ID NO. 6350)
17SB3_HP1584S1561	CUACUACUATCCATTCACTCAAAACTTTT	(SEQ ID NO. 6351)
17SB4_HP1585S1562	CUACUACUACCTTTTAGCGTTTGAGGGAAT	(SEQ ID NO. 6352)
17SB5_HP1586S1563	CUACUACUAGCTTATAGGGTAACCGTTCCG	(SEQ ID NO. 6353)
17SB6_HP1587S1564	CUACUACUACTACTTTACCCACACATAAC	(SEQ ID NO. 6354)
17SB7_HP1588S1565	CUACUACUAAAAGCTTAAATGGATTCTATT	(SEQ ID NO. 6355)
17SB8_HP1590S1566	CUACUACUAAATCTGTGTGAACCTTGTCAAAT	(SEQ ID NO. 6356)
17SB9_HP0009S1567	CUACUACUATTAATAATTGCGAATAAGCGC	(SEQ ID NO. 6357)
17SB10_HP0058S1568	CUACUACUACGATAGTATAATATGTTGGTG	(SEQ ID NO. 6358)
17SB11_HP0076S1569	CUACUACUATTTTCACTGAAGCGTTAAGCC	(SEQ ID NO. 6359)
17SB12_HP0107S1570	CUACUACUATTTTGAGAGATAACGATCGGC	(SEQ ID NO. 6360)
17SC1_HP0118S1571	CUACUACUACCTTTTACTATAACCATAAAC	(SEQ ID NO. 6361)
17SC2_HP0119S1572	CUACUACUATTTAGCTTGAGCTTTTAGAGCG	(SEQ ID NO. 6362)
17SC3_HP0120S1573	CUACUACUATTTACTATAACCATAAACCCGC	(SEQ ID NO. 6363)
17SC4_HP0143S1574	CUACUACUACAAATTGACCCCTTGAATGTG	(SEQ ID NO. 6364)
17SC5_HP0208S1575	CUACUACUACCTTTTAAATCAGTCGCTTCAC	(SEQ ID NO. 6365)

17SC6_HP0381S1576	CUACUACUATTTTAAACGCCCAAAACCC	(SEQ ID NO. 6366)
17SC7_HP0451S1577	CUACUACUATCTTCTCTTTGCTTCATGTGG	(SEQ ID NO. 6367)
17SC8_HP0521S1578	CUACUACUAAATCCATTGCATTTGGGATATT	(SEQ ID NO. 6368)
17SC9_HP0544S1579	CUACUACUATTTGCACACAGCCGCCCAAG	(SEQ ID NO. 6369)
17SC10_HP0548S1580	CUACUACUATACAGACTTGCAAAATAGCGC	(SEQ ID NO. 6370)
17SC11_HP0550S1581	CUACUACUATCATTTGTCTTAGTTTGTTC	(SEQ ID NO. 6371)
17SC12_HP0619S1582	CUACUACUAAAAGGAGCGGTATCGTCTGCTG	(SEQ ID NO. 6372)
17SD1_HP0713S1583	CUACUACUAGGCTTATTCTTTATTGAGTATC	(SEQ ID NO. 6373)
17SD2_HP0715S1584	CUACUACUACCTAAATAATACTTACGCACC	(SEQ ID NO. 6374)
17SD3_HP0722S1585	CUACUACUACTATAGAGCCTTCTGTATTGC	(SEQ ID NO. 6375)
17SD4_HP0725S1586	CUACUACUACTCATCGCTGCTAAAGCTTGG	(SEQ ID NO. 6376)
17SD5_HP0744S1587	CUACUACUAGAGAGAAGTTATCATGCCAAC	(SEQ ID NO. 6377)
17SD6_HP0790S1588	CUACUACUATCTCGGTAATATTCGTATTGC	(SEQ ID NO. 6378)
17SD7_HP0807S1589	CUACUACUATTTGCTGAATTGAGGCGGAATG	(SEQ ID NO. 6379)
17SD8_HP0814S1590	CUACUACUAAATGCGTGATTTTATGCGTGCC	(SEQ ID NO. 6380)
17SD9_HP0882S1591	CUACUACUACTTTGCTTCATTAGCGGTTTG	(SEQ ID NO. 6381)
17SD10_HP0884S1592	CUACUACUATTTTCGCATAGACACGCTCCC	(SEQ ID NO. 6382)
17SD11_HP0897S1593	CUACUACUAGGCGTGCGCAGCGTATTATCG	(SEQ ID NO. 6383)
17SD12_HP0898S1594	CUACUACUACGCGCTTGTAACGATAAATACG	(SEQ ID NO. 6384)
17SE1_HP0903S1595	CUACUACUATTTTGGTTTGCAAGCGATTTC	(SEQ ID NO. 6385)
17SE2_HP0904S1596	CUACUACUATGCGCTTGAAGGCGCTAATC	(SEQ ID NO. 6386)
17SE3_HP0988S1597	CUACUACUAAACCTTGATTTTCTATATACGC	(SEQ ID NO. 6387)
17SE4_HP0998S1598	CUACUACUATTTCTATATACGCCCTTGATCG	(SEQ ID NO. 6388)
17SE5_HP1007S1599	CUACUACUATGCATGGATATTTCTTACCCC	(SEQ ID NO. 6389)
17SE6_HP1180S1600	CUACUACUAAATGAATAACCCGGCGATAGTC	(SEQ ID NO. 6390)
17SE7_HP1188S1601	CUACUACUAAAGAGGTTGAAAGGTGGGCTTG	(SEQ ID NO. 6391)
17SE8_HP1280S1602	CUACUACUAGGCATGGCTTGCCCTTATGTTT	(SEQ ID NO. 6392)
17SE9_HP1353S1603	CUACUACUAGGATTTTGCAAGATTCTTTC	(SEQ ID NO. 6393)
17SE10_HP1365S1604	CUACUACUATAGTGGTTAAAGCGATAGCC	(SEQ ID NO. 6394)
17SE11_HP1369S1605	CUACUACUAAAACACTTCGTCCATGAGCAC	(SEQ ID NO. 6395)
17SE12_HP1372S1606	CUACUACUATGCCCTTAAAGTTTAGCGCC	(SEQ ID NO. 6396)
17SF1_HP1417S1607	CUACUACUACATGCTGCCATAAACAACAGC	(SEQ ID NO. 6397)

17SF2_HP1427S1608	CUACUACUACGTCGTGATGCCCGTGGCAGCA	(SEQ ID NO. 6398)
17SF3_HP1522S1609	CUACUACUACGTTTGGGTTTCCATTCTATC	(SEQ ID NO. 6399)
17SF4_HP1538S1610	CUACUACUACCCACGCATAAGCCCAAGAACG	(SEQ ID NO. 6400)
17SF5_HP1561S1611	CUACUACUAAAAGGCTCAACCTCTGCATC	(SEQ ID NO. 6401)
17SF6_HP1562S1612	CUACUACUAGGTTCAACCTCTGCATCATTC	(SEQ ID NO. 6402)
17SF7_HP1589S1613	CUACUACUATTAATTCGTTTGCTGTGCC	(SEQ ID NO. 6403)
17SF8_HP0527-1S1614	CUACUACUAAACAATCTAGAACCTGTGTTC	(SEQ ID NO. 6404)
17SF9_HP0527-2S1615	CUACUACUACTTGGCAGTTTCTGCGACATC	(SEQ ID NO. 6405)
17SF10_HP0609-1S1616	CUACUACUAAATCGTGTGCTAGCTTTATCATC	(SEQ ID NO. 6406)
17SF11_HP609-2S1617	CUACUACUATAATAGAGTCCCTTGTTCGCC	(SEQ ID NO. 6407)
17SF12_HP610-1S1618	CUACUACUACGTACTAGAAATGGAGCAATTG	(SEQ ID NO. 6408)
17SG1_HP610-2S1619	CUACUACUACGCATACAAGCCACATCCAC	(SEQ ID NO. 6409)
17SG2_HP887-1S1620	CUACUACUAAAGTGCCAGTTTCCAAAACGCAC	(SEQ ID NO. 6410)
17SG3_HP887-2S1621	CUACUACUACCTCATTCCTAAATTGGAAGC	(SEQ ID NO. 6411)
17SG4_HP922-1S1622	CUACUACUAGCGGTGTTTGTGATTGTGGTG	(SEQ ID NO. 6412)
17SG5_HP922-2S1623	CUACUACUACGCTTTGAAAGGTTACATCCG	(SEQ ID NO. 6413)
17SG6_HP922-3S1624	CUACUACUAGATTGATGATTGAGAGTAGGG	(SEQ ID NO. 6414)
17SG7_HP1157-1S1625	CUACUACUAGTTATTGTTAGGTGTCATCTC	(SEQ ID NO. 6415)
17SG8_HP1157-2S1626	CUACUACUACCTCCTGTAACTCACATCAGC	(SEQ ID NO. 6416)
17SG9_HP1198-1S1627	CUACUACUAGCACGGTTGGCGTCATCATGC	(SEQ ID NO. 6417)
17SG10_HP1198-2S1628	CUACUACUACGCTCCAAGCTCCATTAAAGCG	(SEQ ID NO. 6418)
17SG11_HP1198-3S1629	CUACUACUAGTCGTTTCTTGGAAAGAGGCC	(SEQ ID NO. 6419)
17SG12_HP1517-1S1630	CUACUACUAAAGCGAAATTAGCGCACTTAATG	(SEQ ID NO. 6420)
17SH1_HP1517-2S1631	CUACUACUATGATCTTAAATTTCTTCATCGG	(SEQ ID NO. 6421)
17RA1_HP1570R1547	CAUCAUCAUATGATTAAAGTTATTGCTTTTA	(SEQ ID NO. 6422)
17RA2_HP1571R1548	CAUCAUCAUAATGGGTTTGGCGTTGGAAAA	(SEQ ID NO. 6423)
17RA3_HP1572R1549	CAUCAUCAUGATGTCAAAAAGAAATGAAGTG	(SEQ ID NO. 6424)
17RA4_HP1573R1550	CAUCAUCAUGGATAAAAGCATGTTTATAGA	(SEQ ID NO. 6425)
17RA5_HP1574R1551	CAUCAUCAUTTATGTTTCAGCGGTTCTAATCC	(SEQ ID NO. 6426)
17RA6_HP1575R1552	CAUCAUCAUGGTATTAGATGAATAAAACCA	(SEQ ID NO. 6427)
17RA7_HP1576R1553	CAUCAUCAUAAACGATGGTAGTAGAATTAA	(SEQ ID NO. 6428)
17RA8_HP1577R1554	CAUCAUCAUAATGATTTCTCATAATGCTCAT	(SEQ ID NO. 6429)

17RA9_HP1578R1555	CAUCAUCAAATGATGCAACATGAAATC	(SEQ ID NO. 6430)
17RA10_HP1579R1556	CAUCAUCAAAGTGCTAAAAAATTATTA	(SEQ ID NO. 6431)
17RA11_HP1580R1557	CAUCAUCAUCATGCTATTTAATGGGCTATG	(SEQ ID NO. 6432)
17RA12_HP1581R1558	CAUCAUCAUAGTGTGTGGTGCTATATTT	(SEQ ID NO. 6433)
17RB1_HP1582R1559	CAUCAUCAUAGTCATGCGTTTGTGGATTGAA	(SEQ ID NO. 6434)
17RB2_HP1583R1560	CAUCAUCAUCGATAAAATGGCTAAAAGAA	(SEQ ID NO. 6435)
17RB3_HP1584R1561	CAUCAUCAUATGATTTTAAGCATTTGAAAGT	(SEQ ID NO. 6436)
17RB4_HP1585R1562	CAUCAUCAUGAAAATCATGCTCCGTTCTCT	(SEQ ID NO. 6437)
17RB5_HP1586R1563	CAUCAUCAUCTTGGGGTGGTTTTGTGTTTT	(SEQ ID NO. 6438)
17RB6_HP1587R1564	CAUCAUCAUGCACTAAGAATGAATGAAGAC	(SEQ ID NO. 6439)
17RB7_HP1588R1565	CAUCAUCAUATGGCATAACAAATATGATAGA	(SEQ ID NO. 6440)
17RB8_HP1590R1566	CAUCAUCAUTATAATATATGGCATAACAGATA	(SEQ ID NO. 6441)
17RB9_HP0009S1567	CAUCAUCAUCAATCAAGCGGTAACGAACGC	(SEQ ID NO. 6442)
17RB10_HP0058S1568	CAUCAUCAUAGAGCTTTTAAATCTGTTGG	(SEQ ID NO. 6443)
17RB11_HP0076S1569	CAUCAUCAUATGGCAAAATCATAAGTCCGCA	(SEQ ID NO. 6444)
17RB12_HP0107S1570	CAUCAUCAUATGATGATTATCACCACAATG	(SEQ ID NO. 6445)
17RC1_HP0118S1571	CAUCAUCAUATAAGGTTGGCAAGAATACAG	(SEQ ID NO. 6446)
17RC2_HP0119S1572	CAUCAUCAUAAAGAGTTTGTAGTAATGCTTGC	(SEQ ID NO. 6447)
17RC3_HP0120S1573	CAUCAUCAUAAAGGTTGGCAAGAATACAGAG	(SEQ ID NO. 6448)
17RC4_HP0143S1574	CAUCAUCAUATGATTAAACAAACCCCTCATC	(SEQ ID NO. 6449)
17RC5_HP0208S1575	CAUCAUCAUAAAGAGATTATCCCTATTGTCG	(SEQ ID NO. 6450)
17RC6_HP0381S1576	CAUCAUCAUACCCCTTTCGCAAGCCCTAAAC	(SEQ ID NO. 6451)
17RC7_HP0451S1577	CAUCAUCAUTAAAGTTTATCTAATAAAACCG	(SEQ ID NO. 6452)
17RC8_HP0521S1578	CAUCAUCAUATGATACAAAGAGGATTGAGT	(SEQ ID NO. 6453)
17RC9_HP0544S1579	CAUCAUCAUATTTAGCGGATTGTTATTGTG	(SEQ ID NO. 6454)
17RC10_HP0548S1580	CAUCAUCAUAATTTGATGTTACCATCATAG	(SEQ ID NO. 6455)
17RC11_HP0550S1581	CAUCAUCAUACGGCTACGCAAAAGTTTCGC	(SEQ ID NO. 6456)
17RC12_HP0619S1582	CAUCAUCAUTTTAAAGAAAGTCAAAGGCG	(SEQ ID NO. 6457)
17RD1_HP0713S1583	CAUCAUCAUCCTATGGCTATAAAAGAAATGG	(SEQ ID NO. 6458)
17RD2_HP0715S1584	CAUCAUCAUTGGATATTTTAAAGCAGAGC	(SEQ ID NO. 6459)
17RD3_HP0722S1585	CAUCAUCAUGTCAAAAACACCGCGGAATTG	(SEQ ID NO. 6460)
17RD4_HP0725S1586	CAUCAUCAUGGCTATCAAAATCGGCGAAGC	(SEQ ID NO. 6461)

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17RD5_HP0744S1587	CAUCAUAUATCATGAGAAATTGAATGGCG	(SEQ ID NO. 6462)
17RD6_HP0790S1588	CAUCAUCAUCGGCTTACTCCAAACTCTAGCG	(SEQ ID NO. 6463)
17RD7_HP0807S1589	CAUCAUCAUCGGCGAAGAACAGCATCACAC	(SEQ ID NO. 6464)
17RD8_HP0814S1590	CAUCAUCAUAAGCCGGCTAGAAAAAGAGCG	(SEQ ID NO. 6465)
17RD9_HP0882S1591	CAUCAUCAUTAAGAATTTAGAATTAGCGC	(SEQ ID NO. 6466)
17RD10_HP0884S1592	CAUCAUAUATGAGCTTGGAGCGTTTGGCC	(SEQ ID NO. 6467)
17RD11_HP0897S1593	CAUCAUCAUCCAGGACCAAAACCTGGTGCC	(SEQ ID NO. 6468)
17RD12_HP0898S1594	CAUCAUAUAGCGTTGATCACCCTCATTTTCG	(SEQ ID NO. 6469)
17RE1_HP0903S1595	CAUCAUAUGTGTGTAATCTGGCAGTTTCG	(SEQ ID NO. 6470)
17RE2_HP0904S1596	CAUCAUAUAAAGTGTTTACCAGAGAGC	(SEQ ID NO. 6471)
17RE3_HP0988S1597	CAUCAUAUATGAGGAAAAACCATATATCCA	(SEQ ID NO. 6472)
17RE4_HP0998S1598	CAUCAUAUAACCATATATCCATTAAGGGG	(SEQ ID NO. 6473)
17RE5_HP1007S1599	CAUCAUAUTAAATTCGCTTGATATCCAC	(SEQ ID NO. 6474)
17RE6_HP1180S1600	CAUCAUAUTTTTAGTGTGTAGGGATGGC	(SEQ ID NO. 6475)
17RE7_HP1188S1601	CAUCAUAUTGAAGAGAGTTAGAGAACTTG	(SEQ ID NO. 6476)
17RE8_HP1280S1602	CAUCAUAUAGATTTTAAACGCTCTGTATC	(SEQ ID NO. 6477)
17RE9_HP1353S1603	CAUCAUAUTGTTTCGTGCGCAATACCGCC	(SEQ ID NO. 6478)
17RE10_HP1365S1604	CAUCAUAUTTTTACTAGAGACGATTACC	(SEQ ID NO. 6479)
17RE11_HP1369S1605	CAUCAUAUACGAAGCGCAATTTATGAAG	(SEQ ID NO. 6480)
17RE12_HP1372S1606	CAUCAUAUAAATTCCTTTGGCTTTTAGGG	(SEQ ID NO. 6481)
17RF1_HP1417R1607	CAUCAUAUTGTTTCTCTCTGTGTAACGCTC	(SEQ ID NO. 6482)
17RF2_HP1427S1608	CAUCAUAUTGGCACACCATGAAGAACAAC	(SEQ ID NO. 6483)
17RF3_HP1522S1609	CAUCAUAUCGTTATTTTCCCGGTTGCTTG	(SEQ ID NO. 6484)
17RF4_HP1538S1610	CAUCAUAUAGTTTAAAGATTCTAATCATCC	(SEQ ID NO. 6485)
17RF5_HP1561S1611	CAUCAUAUTTCTTTAGGGGTGCTTGTGCG	(SEQ ID NO. 6486)
17RF6_HP1562S1612	CAUCAUAUTCTCTTATTTCTTTAGGCGCGC	(SEQ ID NO. 6487)
17RF7_HP1589S1613	CAUCAUAUAGTTCAACAGAAATACCAAAGG	(SEQ ID NO. 6488)
17RF8_HP0527-1S1614	CAUCAUAUAAGAAACCCAAACTCAAAATGG	(SEQ ID NO. 6489)
17RF9_HP0527-2S1615	CAUCAUAUGCGAGAAATTACTCACCCCTG	(SEQ ID NO. 6490)
17RF10_HP0609-1S1616	CAUCAUAUACAGATTTAAAGAATGAACGC	(SEQ ID NO. 6491)
17RF11_HP0609-2S1617	CAUCAUAUTTAGTCATGCAGAGCAGACCG	(SEQ ID NO. 6492)
17RF12_HP0610-1S1618	CAUCAUAATAATGCGGATCGATCTGG	(SEQ ID NO. 6493)

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17RG1_HP610-2S1619	CAUCAUGCCTTTGGAGGCGTTTATCAGC	(SEQ ID NO. 6494)
17RG2_HP887-1S1620	CAUCAUAATCGCCCTTTGGTTTCTCTCG	(SEQ ID NO. 6495)
17RG3_HP887-2S1621	CAUCAUGGATTTCAATCAACAATCAAGG	(SEQ ID NO. 6496)
17RG4_HP922-1S1622	CAUCAUGCGTTTAAAGGCCAGGTTG	(SEQ ID NO. 6497)
17RG5_HP922-2S1623	CAUCAUGGAGGATCAAGCGTTATTAGC	(SEQ ID NO. 6498)
17RG6_HP922-3S1624	CAUCAUAGAAAGTCAAGGCTTAGTGAG	(SEQ ID NO. 6499)
17RG7_HP1157-1S1625	CAUCAUGGCTGGTATATGTCTGTAGGC	(SEQ ID NO. 6500)
17RG8_HP1157-2S1626	CAUCAUGATTACGATCCCAATTGAGG	(SEQ ID NO. 6501)
17RG9_HP1198-1S1627	CAUCAUAACAACGAGACAGCTATGATTC	(SEQ ID NO. 6502)
17RG10_HP1198-2S1628	CAUCAUGGCTATTTTGGGATAAAGC	(SEQ ID NO. 6503)
17RG11_HP1198-3S1629	CAUCAUGATGGCAGATAGCGGCGCAAG	(SEQ ID NO. 6504)
17RG12_HP1517-1S1630	CAUCAUGATTACCCCAACACAAACTAC	(SEQ ID NO. 6505)
17RH1_HP1517-2S1631	CAUCAUUCTTAGAAACCCTAACGCACCC	(SEQ ID NO. 6506)

TABLE 4

Oligonucleotides	Sequence : (5'-3')	Reference	SEQ ID NO.
570-1	-AUGAUGAUGGCTTGAATTCGGCGCGCATCGATG-	This study	6507
570-2	-UAGUAGUAGCTCGGCGAGCGTTGGTCTCTGGCCAC-	This study	6508
570-3	-CTTATCATCGATGCGGCGCGAATTC-	This study	6509
570-4	-GTGGCCAGGACCCAAAGCTGCCCGAG-	This study	6510
38bp-R	-CTTAACGTGAGTTTCTGTTCCACTGAGCGTCAGACCCC-	[Seifert, 1986]	6511
HP0061-1	-CGGGGTACCCAAATTCCAATCCITAAACCCC-	[Tomb, 1997]	6512
HP0061-2	-CGCGGATCCCTTAAATAGAGACAAGCGTTCTAAC-	[Tomb, 1997]	6513
HP0130-1	-CGGGGTACCTAAACTTCTCCCTGTCATTCAACCAC-	[Tomb, 1997]	6514
HP0130-2	-CGCGGATCCAAGGCTAGAAAGTGATGCAATCGTT-	[Tomb, 1997]	6515
HP0175-1	-CGGGGTACCGCTTCATTTTCTACAAGGCGGTGGC-	[Tomb, 1997]	6516
HP0175-2	-CGCGGATCCTAGCCAATCGGGATACGATTGATCC-	[Tomb, 1997]	6717
HP0231-1	CGGGGTACCTGTGGGTGGCGT TAAGAGCTTGAAC-	[Tomb, 1997]	6518

HP0231-2	-CGCGGATCCCTTTATATTGTCTCTGATCCCATGTGC-	[Tomb, 1997]	6519
HP0271-1	-CGGGGTACCCAATACTTTTGATTGACTTCACAAGC-	[Tomb, 1997]	6520
HP0271-2	CGCGGATCCATTGACAGCCTTGAAGAAGCGATAGGC-	[Tomb, 1997]	6521
HP0358-1	-CGGGGTACCTATGCCCTTTAATATTCGCCAGAAGTG-	[Tomb, 1997]	6522
HP0358-2	-CGCGGATCCAACCAAGCAACGCCCTGCTCTCTGATCTC-	[Tomb, 1997]	6523
HP0377-1	-CGGGGTACCGTAGTCGCGCAATTCITTTGAC-	[Tomb, 1997]	6524
HP0377-2	-CGCGGATCCAAAATGTCCACAGAAGAATTAGCGGC-	[Tomb, 1997]	6525
HP0394-1	-CGGGGTACCGTTATCATATTGGAATAATACGGGGC-	[Tomb, 1997]	6526
HP0394-2	-CGCGGATCCAAACTCATCTATCAAAAACCCGTCGCG-	[Tomb, 1997]	6527
HP0419-1	-CGGGGTACCATCCTCTACCCCCAAAGACTC-	[Tomb, 1997]	6528
HP0419-2	-CGCGGATCCGGGAGCTGGTGTGGATACCTTAATC-	[Tomb, 1997]	6529
HP0553-1	-CGGGGTACCAACCCATTCCCTAAGCAATACGC-	[Tomb, 1997]	6530
HP0553-2	-CGCGGATCCGAATTGGCTTATGAGGGGATTGTG-	[Tomb, 1997]	6531
HP0650-1	-CGGGGTACCAAGGAGCGATAAAATACTGCAATC-	[Tomb, 1997]	6532
HP0650-2	-CGCGGATCCAATTTAGAGAAGAATAACGCATGC-	[Tomb, 1997]	6533
HP0659-1	-CGGGGTACCAAGTTTGGCGCGTTGCTTTGAACGCC-	[Tomb, 1997]	6534
HP0659-2	-CGCGGATCCTTGGAATTCAGGGGTGAGTAAGGCT-	[Tomb, 1997]	6535
HP0697-1	-CGGGGTACCTGACCGCATGAACACTTAATAACC-	[Tomb, 1997]	6536

HP0697-2	-CGCGGATCCGCGTTTTTGGCTCCAGAGGAGAACTGG-	1997]	6537
HP0699-1	-CGGGGTACCCTGCATATCTTGTCTCTAAATAGGGG-	[Tomb, 1997]	6538
HP0699-2	-CGCGGATCCAAGTTGGGGGTTTCTATCCAAGCGCAC-	[Tomb, 1997]	6539
HP0721-1	-CGGGGTACCTCATGCAACTGCTTATGGAACGCC-	[Tomb, 1997]	6540
HP0721-2	-CGCGGATCCACTAAACACAGACAAATGACCGTGCGG-	[Tomb, 1997]	6541
HP0726-1	-CGGGGTACCGCGCTTTAGCGTATTCTACATCCCCC-	[Tomb, 1997]	6542
HP0726-2	-CGCGGATCCGTGTTTGTTAACCTCCCTATAGACACC-	[Tomb, 1997]	6543
HP0739-1	-CGGGGTACCCCGCCACTTTCCTCCCAAAGCT-	[Tomb, 1997]	6544
HP0739-2	-CGCGGATCCGGCTTGAAATTAGGGTTTTTGAGG-	[Tomb, 1997]	6545
HP0746-1	-CGGGGTACCGCCCCCTCATATAATAGTGGGTCCG-	[Tomb, 1997]	6546
HP0746-2	-CGCGGATCCGCCCTTGATAAAACGCATCTTGAAGGG-	[Tomb, 1997]	6547
HP0838-1	-CGGGGTACCTCGTTTAGTCATGTAAATATCGCCC-	[Tomb, 1997]	6548
HP0838-2	-CGCGGATCCTGTTCGGCTAAATGGATTGCTGCAAGG-	[Tomb, 1997]	6549
HP0862-1	-CGGGGTACCGCCATTATTACCGCCAGACA-	[Tomb, 1997]	6550
HP0862-2	-CGCGGATCCGAGGGCAAGCATTTAGGAGGG-	[Tomb, 1997]	6551
HP0928-1	-CGGGGTACCGATCGCGCTAATGCCTACAATCTT-	[Tomb, 1997]	6552
HP0928-2	-CGCGGATCCCTCATTTGAAATTTATAGCAGACGC-	[Tomb, 1997]	6553

HP0935-1	-CGGGGTACCGATAGGATTAAGCCCAAAATCCC-	[Tomb, 1997]	6554
HP0935-2	-CGCGGATCCACAGAAAGCCGAGCTGTGCAAATTCCAC-	[Tomb, 1997]	6555
HP0947-1	-CGGGGTACCTGCTTTAATTGACAAACAAAAGC-	[Tomb, 1997]	6556
HP0947-2	-CGCGGATCCTCTGCGTTGACGAGCAACACATGAAAGG-	[Tomb, 1997]	6557
HP0953-1	-CGGGGTACCAACACGATCAGACTCAATTAGCG-	[Tomb, 1997]	6558
HP0953-2	-CGCGGATCCCATGAAATCATGATGAAGTATAAAAACGC	[Tomb, 1997]	6559
HP0973-1	-CGGGGTACCCGCGATGACTCTTTCCATGCAATGCC-	[Tomb, 1997]	6560
HP0973-2	-CGCGGATCCGAAACTAAATAGAAAGAAACCCAAAGCA-	[Tomb, 1997]	6561
HP1012-1	-CGGGGTACCGCCTTTCTTCAGCGACCACCTTGAC-	[Tomb, 1997]	6562
HP1012-2	-CGCGGATCCGGTAATCCTAATGTCAAAGCCGAAGCC-	[Tomb, 1997]	6563
HP1014-1	-CGGGGTACCATCGCATAAACGGTGCAAAATCCCC-	[Tomb, 1997]	6564
HP1014-2	-CGCGGATCCACCGGGAATCTAGTTTATATGCC-	[Tomb, 1997]	6565
HP1023-1	-CGGGGTACCTGATATATAAGGTTAGCCAAACGC-	[Tomb, 1997]	6566
HP1023-2	-CGCGGATCCAATGACAGGACTAAATTCTATGGCCGT-	[Tomb, 1997]	6567
HP1028-1	-CGGGGTACCATAAAAATTATACGCTTTACCGCC-	[Tomb, 1997]	6568
HP1028-2	-CGCGGATCCGGCAAGACCTACTACGTGAGAGTCACT-	[Tomb, 1997]	6569
HP1039-1	-CGGGGTACCGTTTAGAGCGAATAATTGTAGCGG-	[Tomb, 1997]	6570
HP1039-2	-CGCGGATCCAGCGAGAAATGCCAGAGGTTAGAAGAG-	[Tomb, 1997]	6571

		1997]	
HP1053-1	-CGGGGTACCATGGGTTTGGATGATCGGTTTCG-	[Tomb, 1997]	6572
HP1053-2	-CGCGGATCCGAACCTAAACAACGATTATGAGCGC-	[Tomb, 1997]	6573
HP1085-1	-CGGGGTACCACTCATGGTCATAGTAAGTGCCGC-	[Tomb, 1997]	6574
HP1085-2	-CGCGGATCCGTGGAGATTTTCACGCAAATAACGACTGG-	[Tomb, 1997]	6575
HP1230-1	-CGGGGTACCGAAGAAGCGTTAAATCAATGACG-	[Tomb, 1997]	6576
HP1230-2	-CGCGGATCCTACCCCAAACGATGCGAATCTCTCT-	[Tomb, 1997]	6577
HP1245-1	-CGGGGTACCTTTGCCCGTTTGATCCATCCAAC-	[Tomb, 1997]	6578
HP1245-2	-CGCGGATCCAATTCCCGCCACACTATCACAGCGGAC-	[Tomb, 1997]	6579
HP1263-1	-CGGGGTACCAATTGAGTAAGTCTCTACCGC-	[Tomb, 1997]	6580
HP1263-2	-CGCGGATCCCAAACCCGCATTATATTCCGCCCCCT-	[Tomb, 1997]	6581
HP1265-1	-CGGGGTACCTTCCGTGTGGATTTCATAAGACGC-	[Tomb, 1997]	6582
HP1265-2	-CGCGGATCCCTTGCTATGATTCAAGTGCAACGACC-	[Tomb, 1997]	6583
HP1493-1	-CGGGGTACCTTCAGCCATTGGTTTAGCCCC-	[Tomb, 1997]	6584
HP1493-2	-CGCGGATCCGCTGAAGAATTGATGTGCAATTTCCTC-	[Tomb, 1997]	6585
HP1568-1	-CGGGGTACCGTGTCCCTGTGGCTTCATAGCGC-	[Tomb, 1997]	6586
HP1568-2	-CGCGGATCCACAGAGGACAAATCGTGAAATCAGCGGG-	[Tomb, 1997]	6587

TABLE 5

ORF N°	Gene name	Functional category (a)	Size (b)	Inter.protein (c)
hp0011	<i>hspA</i>	Co-chaperone (groES)	367	HP0011 (HspA)
hp0025	<i>hopD</i>	HopD functions as a porin on the outer membrane of H.pylori	1101	HP0595
hp0042	<i>trbl, comb3</i>	Predicted DNA transformation competence protein	702	HP0419
hp0045	<i>wbcJ</i>	Predicted GDP-fucose synthetase	933	RdxA
hp0061	<i>spp</i>	H. pylori specific predicted protein with no known function	570	HP0066
hp0063	<i>spp</i>	H. pylori specific predicted protein with no known function	1491	HP0064
hp0064	<i>spp</i>	H. pylori specific predicted protein with no known function	420	HP0063
hp0065	<i>spp</i>	H. pylori specific predicted protein with no known function	354	HP0061
hp0066	<i>CH- ATPbinding</i>	Predicted ATP-binding protein	2496	HP0061
hp0071	<i>urel</i>	Urea transporter	585	HP0288
hp0100	<i>chp</i>	Conserved hypothetical protein	1107	HP0823
hp0108	<i>spp</i>	H. pylori specific predicted protein with no known function	561	HP1541
hp0115	<i>flaB</i>	Flagellin B (flaB)	1545	HP0753 (Flis)
hp0132	<i>sdaA</i>	Predicted L-serine deaminase	1368	HP0338
hp0134	<i>Dhs1, aroF</i>	Pred. tyrosine-regulated 3-deoxy-D-arabino-heptulosonate 7-phosphate synthase	1350	HP1012
hp0156	<i>chp</i>	Conserved hypothetical periplasmic protein	603	HP0156
hp0172	<i>moeA</i>	Predicted molybdopterin biosynthesis protein	1176	HP0507
hp0175	<i>pplase</i>	Predicted peptidyl-prolyl cis-trans isomerase	897	HP0608
hp0224	<i>msrA</i>	Predicted peptide methionine sulfoxide reductase	1077	HP0377 (DsbC)
hp0246	<i>flgI</i>	Predicted flagellar basal-body P-ring protein	585	HP0325 (FlgH)
hp0247	<i>deaD</i>	Predicted RNA helicase	1479	HP0247
hp0263	<i>hpaim</i>	Predicted adenine specific DNA methyltransferase	759	HP0486
hp0272	<i>spp</i>	H. pylori specific predicted protein with no known function	534	HP0762

hp0287	spp	H. pylori specific predicted protein with no known function	519	HP0862
hp0304	spp	H. pylori specific predicted protein with no known function	987	HP0950
hp0325	flgH	Predicted flagellar basal-body L-ring protein	714	HP1390
hp0347	chp	Conserved hypothetical protein	897	HP0510
hp0377	dsbC	Predicted thiol:disulfide interchange protein	666	HP0224
hp0419	chp	Homology with putative S-adenosylmethionine-dependent methyltransferase	786	HP0042
hp0482	spp	H. pylori specific predicted protein with no known function	513	HP0482
hp0506	omp	Predicted outer membrane protein	1212	HP0762
hp0507	spp	H. pylori specific predicted protein with no known function	639	HP0172
hp0510	dapB	Predicted dihydrodipicolinate reductase	765	HP0347
hp0525	virB11-1	Cag pathogenicity island encoded protein/ATPase protein	993	HP0525
hp0553	chp	Homology with putative RNA methyltransferases	684	HP0553
hp0582	spp	H. pylori specific predicted protein with no known function	975	HP0958
hp0595	spp	H. pylori specific predicted protein with no known function	1473	HP0870 (FlgE)
hp0601	flaA	Flagellin A (flaA)	1533	HP0753 (Flis)
hp0602	magIII	3-methyladenine DNA glycosylase	654	HP1402
hp0608	spp	H. pylori specific predicted protein with no known function	483	HP0175
hp0620	ppa	Inorganic pyrophosphatase (ppa)	522	HP0620
hp0634	hydD	Quinone-reactive Ni/Fe hydrogenase (hydD)	537	HP0285
hp0642	frxA	NAD(P)H-flavin oxidoreductase	654	HP0642
hp0650	spp	H. pylori predicted coding region HP0650	591	HP1245
hp0691	yxjD	3-oxoadipate coA-transferase subunit A (yxjD)	699	HP0692
hp0692	yxjE	3-oxoadipate coA-transferase subunit B (yxjE)	624	HP0691
hp0696	hyuB	N-methylhydantoinase	2298	HP0697
hp0697	spp	H. pylori specific predicted protein with no known function	507	HP0696
hp0710	chp	H. pylori specific predicted protein with no known function	1983	HP0100
hp0714	rpoN	RNA polymerase sigma-54 factor (rpoN)	1245	HP0958
hp0739	chp	Conserved hypothetical protein	726	HP0810
hp0753	Flis	Flagellar protein (flis)	381	HP115 (FlaB)
hp0762	spp	H. pylori specific predicted protein with no known function	558	HP0506
hp0800	moaE	Molybdopterin converting factor, subunit 2 (moaE)	438	HP0801
hp0801	moaD	Molybdopterin converting factor, subunit 1 (moaD)	225	HP0800
hp0806	spp	H. pylori specific predicted protein with no known function	621	HP0134

hp0810	<i>chp</i>	Conserved hypothetical protein	600	HP0739
hp0821	<i>uvrC</i>	Excinuclease ABC subunit C (<i>uvrC</i>)	1785	HP0821
hp0822	<i>metL</i>	Predicted homoserine dehydrogenase	1263	HP0822
hp0833	<i>spp</i>	H. pylori specific predicted protein with no known function	879	HP1286
hp0862	<i>spp</i>	H. pylori predicted coding region HP0862	672	HP1474
hp0874	<i>spp</i>	H. pylori specific predicted protein with no known function	873	HP0875
hp0875	<i>Kat A</i>	Catalase	1518	HP0874
hp0928	<i>foIE</i>	GTP cyclohydrolase I (foIE)	543	HP0928
hp0954	<i>rdxA</i>	Oxygen-insensitive NAD(P)H nitroreductase	633	HP0045
hp0958	<i>spp</i>	H. pylori specific predicted protein with no known function	765	HP0714
hp0990*	<i>spp</i>	H. pylori specific predicted protein with no known function	669	HP0909
hp1012	<i>pqqE</i>	Protease	1332	HP0134
hp1014	<i>hdhA</i>	7-alpha-hydroxysteroid dehydrogenase (hdhA)	789	HP1014
hp1032	<i>flhA</i>	Alternative transcription initiation factor, sigma-F (<i>flhA</i>)	768	HP1122
hp1035	<i>flhF</i>	Flagellar biosynthesis protein (<i>flhF</i>)	1380	HP0167
hp1074*	<i>spp</i>	H. pylori specific predicted protein with no known function	789	HP1497
hp1114	<i>uvrB</i>	Excinuclease ABC subunit B (<i>uvrB</i>)	1977	HP0821
hp1118	<i>ggt</i>	Gamma-glutamyltranspeptidase	1701	HP0822
hp1143	<i>spp</i>	H. pylori specific predicted protein with no known function	1302	HP0137
hp1160	<i>chp</i>	Conserved hypothetical	420	HP0712
hp1173	<i>spp</i>	H. pylori specific predicted protein with no known function	552	HP0595
hp1230	<i>spp</i>	H. pylori specific predicted protein with no known function	543	HP1529
hp1231#	<i>hoIB</i>	DNA-polymerase III delta subunit	659	HP1247
hp1245	<i>ssb</i>	Single-strand DNA-binding protein	540	HP0661
hp1247	<i>spp</i>	H. pylori specific predicted protein with no known function	1023	HP1231
hp1255	<i>secG</i>	Protein translocation protein, low temperature (<i>secG</i>)	606	HP1072
hp1259	<i>chp</i>	Conserved hypothetical protein	618	HP1259
hp1263	<i>nuoD</i>	Predicted NADH-ubiquinone oxidoreductase chain D	1230	HP0276
hp1286	<i>spp</i>	Conserved hypothetical secreted protein	549	HP1492
hp1322	<i>spp</i>	H. pylori specific predicted protein with no known function	606	HP1488
hp1338	<i>nikR</i>	Nickel regulator protein	444	HP1338
hp1379	<i>lon</i>	Predicted ATP-dependent protease	2505	HP1286
hp1399	<i>rocF</i>	Arginase	966	HP0108
hp1413	<i>chp</i>	Conserved hypothetical protein	444	HP1413

hp1430	<i>chp</i>	Conserved hypothetical protein	2067	HP1072
hp1464	<i>chp</i>	Putative ABC transport system	816	HP0887
hp1489	<i>spp</i>	Weak homology with an outer-membrane protein of the type I secretion system	1533	HP0841
hp1493	<i>spp</i>	H. pylori specific predicted protein with no known function	612	HP1025
hp1527	<i>spp</i>	H. pylori specific predicted protein with no known function	1440	HP1158
hp1529#	<i>dnaA</i>	Predicted chromosomal replication initiator protein	1374	HP1230

Table 5 : List of the 96 selected ORFs of the genome of strain 26695 analyzed in this study. Grey lines indicate, ORFs identified as Putative Essential Genes (PEGs) based on the inability to isolate kanamycin resistant transformants when the recombinant plasmid corresponding to the Tn3-Km disrupted cloned ORF was used to transform *H. pylori* strain HAS141. Bold lines indicate ORFs that are true essential genes. ORF number with an asterisk (*) non ubiquitous ORFs, # genes known to be essential for which resistant transposon insertion occurred via integration of the plasmid through a single crossing over (transformants were traces of the vector were demonstrated by DNA/DNA hybridization). «*spp* »: *H. pylori* specific predicted protein encoding gene ; *chp* :conserved hypothetical protein encoding gene.
(a and b) - Functional categories and sizes are according to the characteristics described in the <http://genolist.pasteur.fr/PyloriGene/> data base.

(c) – Interacting proteins have been screened through the two hybrid assay in yeast [Rain, 2001 #95]; protein-protein interactions were scored and classified in categories. The indicated interacting protein corresponds to that with the highest score for a given bait (<http://pim.hybrigenics.com/pimrider/>).

TABLE 6

ORF N°	Gene name	Functional category	
HP0130	spp	H. pylori specific predicted protein with no known function	861
HP0231	spp	H. pylori specific predicted protein with no known function	798
HP0271	spp	H. pylori specific predicted protein with no known function	984
HP0292	spp	H. pylori specific predicted protein with no known function	873
HP0304	spp	H. pylori specific predicted protein with no known function	990
HP0358	spp	H. pylori specific predicted protein with no known function	1536
HP0394	spp	H. pylori specific predicted protein with no known function	759
HP0508	spp	H. pylori specific predicted protein with no known function	1359
HP0563	spp	H. pylori specific predicted protein with no known function	1251
HP0565	spp	H. pylori specific predicted protein with no known function	648
HP0578	spp	H. pylori specific predicted protein with no known function	2037
HP0580	spp	H. pylori specific predicted protein with no known function	1119
HP0659	spp	H. pylori specific predicted protein with no known function	1245
HP0697	spp	H. pylori specific predicted protein with no known function	507
HP0699	spp	H. pylori specific predicted protein with no known function	1029
HP0721	spp	H. pylori specific predicted protein with no known function	459
HP0726	spp	H. pylori specific predicted protein with no known function	918
HP0746	spp	H. pylori specific predicted protein with no known function	1260
HP0771	spp	H. pylori specific predicted protein with no known function	738
HP0838	spp	H. pylori specific predicted protein with no known function	618
HP0842	spp	H. pylori specific predicted protein with no known function	738
HP0906	spp	H. pylori specific predicted protein with no known function	1584
HP0935	spp	H. pylori specific predicted protein with no known function	486
HP0947	spp	H. pylori specific predicted protein with no known function	363
HP0953	spp	H. pylori specific predicted protein with no known function	567

HP0971	spp	H. pylori specific predicted protein with no known function	1242
HP0973	spp	H. pylori specific predicted protein with no known function	1062
HP1022	spp	H. pylori specific predicted protein with no known function	837
HP1023	spp	H. pylori specific predicted protein with no known function	1251
HP1028	spp	H. pylori specific predicted protein with no known function	498
HP1039	spp	H. pylori specific predicted protein with no known function	1290
HP1053	spp	H. pylori specific predicted protein with no known function	654
HP1054	spp	H. pylori specific predicted protein with no known function	1269
HP1085	spp	H. pylori specific predicted protein with no known function	516
HP1106	spp	H. pylori specific predicted protein with no known function	1308
HP1265	spp	H. pylori specific predicted protein with no known function	987
HP1327	spp	H. pylori specific predicted protein with no known function	1239
HP1336	spp	H. pylori specific predicted protein with no known function	762
HP1440	spp	H. pylori specific predicted protein with no known function	780
HP1454	spp	H. pylori specific predicted protein with no known function	912
HP1568	spp	H. pylori specific predicted protein with no known function	552
HP1580	spp	H. pylori specific predicted protein with no known function	663

Table 6 : List of the 42 selected ORFs of the *H. pylori* genome, strain 26695, analyzed in this study. Grey lines indicate ORFs identified as Putative Essential Genes (PEGs) based on the inability to isolate kanamycin resistant transformants when the recombinant plasmid corresponding to the Tn3-Km disrupted cloned ORF was used to transform *H. pylori* strain HAS141. Bold lines indicate ORFs that are true essential genes. "pp": *H. pylori* specific predicted protein encoding gene.

TABLE 7

Bait name	SEQ ID No. Nucleic Acid SEQ	Nucleic acid Sequence	SEQ ID No. Amino acid SEQ	Amino Acid Sequence
HP1265	6589	TTGAGCGGCTTTAACCCCTTAAATTCTCCC TTAGTCGCAAGCTCTTCTCTTAGCTTGAAA GAAGCCTATTATTAGAAAAATTATCTCTT AAAAAAGGGTTAAATCCATTACAAGATG ACCAAAGATAGCTTAAACCTTTTAGAAAA AAGCGATTTGTGCGTTTGTGTTGGGGTT TTTCAACCGCTTGTGTAATGAAACGAA CGATGGATTTAGAAAGCATTAGCCACTCA AAACGCCCTACGCCCTTGTTAAGACCCCTTA CAAGATACAAGAGACTTGCAAGAAAAATTG CCTTTTGGCTCTTATGAAATCCACACGGA AGCGGCGATTTTGGCCTTGATTTTAAGGGG CATTTTGGAAACAACCTTCCCAATTAAAGGG CATGTTTTAGAAAAAATAGATGTGGGTATTTA AGCTCTGAAGCGAACATGAGCGAAGAGGAA TTGCAAGAGCTTATCGCGCTTATTGTTAA GCAAAAAAAGGGCACTTGTTTAAATAG AGAAATCACTAAGCATGCTAACAAACGCTTT TTATACACCCCTTTAAGCGAGTTGCAAAATT ACCTAGAAATTTACACATCCCTTGCTAT GATTCAAGTGCAACGACCGCTTTTATGATT TTAAAGATCAAGAAATGGCTGTAGAAACA GCCTTTAAAGAGGGCATTTTGCCTTTTAA TCGCAACTCCAATCAAAAGATTTAGAGCTT TTAGAGCGAATCAGTGAGGCTAACGGCTCG TTTGCTATGTTCTTACAAGAGCCTTGAA ACCCCAAAATTATCTTTTCCAAAGCAATTTA	6590	LSGFNPLNSPLVASSLSL KEAYYLEKLSLKKGFKIH YKMTKDSLNLLEKSDLC VLFGGFSNACLNERW ILESISHSKRPYALLRPLQ DTRDLQENCLFASYEHT EAILALILRGILEQTSQL KGVLEKIDVGYLSEA NMSEELQELIALIVKAK KRALVLNREITKHANNAF LYTLSELQNYLEILHPC YDSSATTAFYDFKQDEW LLETAFKEGILPFSQLQS KDLELLERISEANGSFVY VSYKSLETPKLSFSKQFK IANKIEHSKAGFQISNQT LECELEENPHLKGLLAIL EGAFFDAYPYPIILSHSQ GIS

HP0659	6591	AGATCGCTAATAAGATTGAGCATTTCTAAA GCGGGTTTCAAAATCTCCAATCAACGCTA GAATGCGAGTTAGAAAGAAACCCCATTTG AAGGGTTTGATTGCGATTTTAGAAGGGCG TTTTTTGACGCTTACCCCTTATATCCCTATT TTATCCCACTCTCAAGGAATTTC		
	6592	GAGCGGGAATCTAAAGTGGAAGCCTTAGAA GGGAGGAAGCAAGAGTCTTCTTTGGATAAA AAATCCGCCAAGAAATTGAAGAAATAAGGAT TTGAAAAATAAGAAATTGAAAAATAAAAA GAAGAAAAGAAAAACACCGAAGAAAGAA AGAAACAAAGCCAGAGAGAAAGCCAGGGC AGAAGTCCATCATGGGATACCAAAATCCC ACTCAAAAAATAAGCCTCCTAAATCAAA GAGAACGCTAAAGGAGTTCAAAATCAAGGC GTTCAAGCAACGGCCAAAACCTTGAAGAA AAAGACACAACTCTCAAACTCTTGAAAAA AAGGAGCAAGCCCTAGCTCTCAATTCAAT TCCATTTTGGTAATCCTAATGACGCTGCTA ACAATACCCCTTGAAGATAAGGTCGTAGG GGCATTCTTTGCTTGTAAATGGTTCGCCT ATCACGCTGTATCAAAATCCAAGAAAGCAA GAAAAATCTAAAGTGAGCAAGCTCAAGCA AGGATCGTTTGATCGCTGAACGCAATTAA AACCAAGAAAATTGAGCGCTTAAAAATCCATG TAGATGACGACAAGCTAGACCAAGAAATG GCGATGATGGCGCAACAACAGGCATGGAT TTGGATCATTTCAAAACAAATGCTTATGGCT GAGGGACATTATAAACTCTATAGGGATCAG CTTAAGGAGCATTTGGAATGCAAGAAATTG TTGCGTAATATCTTACTCACGAATGTGGATA CCAGCTCTGAAACTAAAATGCGGGAATAT TACAACAAACACAAGGAGCAATTCAGTATC CCCCTGAAATAGAAACCGTGCCTACACT TCCACCAATCAAGAGGATTTAGAAAGGGCG ATGGCGGATCCTAATTGGAAATTCACAGG		EPESKVEALEGRKQ ESSLDKKIRQELKNK DLKNKELKNKKEEK KNTEKKKETKAKRK PRAEVHHGDTKNPT QKITPPKIKENAKGV QNQGVQSNAPKLEEK DTTSQTLEKKGASPSS QFNSIFGNPNDANN TLEDKVVGGISLLVNG SPITLYQIQEEQEKSKV SKAQARDRLIAERIK NQEIERLKIHVDDDKL DQEMAMMAQQQGM LDHFKQMLMAEGHYK LYRDQLKEHLEMQEL LRNILLTNVDTSSETKM REYVYNKHKEQFSIPT TVRYTSTNQEDLERAM ADPNLEIPGVSKANEKI EMKTLNPQIAQVFISHE QGSFTPVMMNGGGQFI TFYKEKKKGKNEVSFSQAK QFIAQKLVEESKDKILE EHFEKLRVKSRJVMIRE

HP0394	6593	GTGAGTAAGGCTAATGAAAAAATAGAGAT GAAAACTTAACCCCTCAAAATCGCTCAAGTC TTTATTTCGCATGAGCAAGGCTCTTTACGCC CGTTATGAATGGGGTGGGGGCGAGTTC ATCACCTTTTATATCAAGGA AAAAAGGGT AAAAACGAAGTGAGCTTCAGTCAGGCCAAG CAATTCA TCGCCCAAAAATTAGTGGAAGAA TCTAAGATAAGATTTTAGAAGAGCATTTT GAAAAATTGCGCGTTAAGTCTAGGATTGTG ATGATTAGAGAG	6594		MLETYALKNGAVFISD AHFLPKSPHLIHTLKEL LSAKPPQVFFMGDIFHV LVGYLPLDKEQQKIIDL IHALSEISQVFYFEGNHD FSMRFVFN SKVMVFER QNQPVLQYDNKRFL AHGDLFITKAYEFYITQ LTSTWARFFLTFLNLLS FKTLYPLFKKLIYQKPV RLWELEPKELQSFIEKR LKAYQNYIKDLNIGSID GIIEGHFHLKSGAKIPLN TPIYCP LPSFYEQSLFKV SSSVLEPSQNKDA
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TABLE 8

Bait ORF	Prey Name	SIDNucleic Acid SEQ ID No.	SID Nucleic Acid Sequence	SID Amino Acid SEQ ID No.	SID Amino acid Sequence
HP1265	HP0025	6595	CGACCCCAACGCTATCAATAACGCAAGG GGCAATTGTGAACGCTAGTGCGAAGAATT TGATCAATGATAAAGAAATTCGCCGGC GTATCAAGCGGTGCTTTTAGCCTTGAATG CGCAGCGGGTGTGGCAAGTCATGAGC TATTCGATCAGCGTTTGTGGCCCTGGCTCT GACAAAATAAAATGCGGGCGTCCAAA CCTTTGAAAATGTCCGTCAAATGGGGG ACTACCATTTGCTGCGATTCTTTATGA ACCAGGAAAGTGGAGCGGTATATCCACTG AAAATTACGCAAAAATCAATAAAGCCTAT CAAATCATCCAAAAGGCTTTTGGAGCAAG CGGCAAGATATTCCTGCCCTTAAGCGACA CCAAAGAACTTAATTTTGAAATTAAAGGGA AAAAAATGATAGCGTCCAGCCAGGAGAA AGATGGAAATTCCCATGGACTAATGGAAA TTTGTTTCAGTCAAGTGGGTGAATGGGAAG TATGAAGAAATTAAAGAGACATCAAAAGT GTCAAATAACGCTCAAGAGCTTTTAAACA GGTAGCACTATTTTAACCACTCTTAATGA AGCATGCCCATGGTTGAGTAATGGTGGTGC AGGCAATGTGGCCGGTGGCAATAGTTTATGG GCCGGAATAGATAAAGCGACGGAGCGCAT GCGGGATTTTAAATAATGAATCAGCGCGATT CAAGACATGATCAAAAACGCTGAAATAGCCG AGAGCAATCCAAAATCGTTACCGCCAACCGG	6596	DPNAINNARGNLNAS AKNLINDKKNSPAYQ AVLLALNAAAGLWQ VMSYSISVCGPGSDK NKNGGVQTFENVPSN GGTTIACDSFYEPGW SGISTENYAKINKAYQ IIQKAFGASGQDIPALS DTKELNFEIKGKKNDS VQGERWKFPTNGK FVSVKWVNGKYEEK EDIKVSNNAQELKQA STILTTLNEACPWLSN GGAGNVAGGNSLWA GIDKGDGSAACGIFKNE ISAIQDMIKNAEIAVEQ SKIVTANAQNHNLNLD TGKAFNPYKDANFAQ SMFANARAQAEILNRA QAVVKDFERIPAAFVK DSLGVCHKEKGSDGNLR GTPSGTIVTSNTWGAG CAYVGETVTNLKNSIA HFGDQAEIRIHNAARNLA YTLANFSGQYKKLGEH YDSITAALSSLPDAQSL

			CAAAACGACACAACCTAGACACTGGGAAAG CATTCAACCCCTATAAAGACGCCAACTTCGCC CAAAGCATGTTTCGCTAACGCTAGAGCGCAAG CGGAGATTTTAAACCGCGCTCAAGCAGTGGT GAAGGACTTTTGAAAGAAATCCCTGCAGCGTTC GTGAAAGACTCTTTAGGAGTATGCCATGAAA AGGAGTAGCGACGGCAATCTCCGTGGCAGGCC ATCTGGCACGGTTACTTCTAACACTTGGGGAGC CGGCTGCGCGTATGTGGGAGAAACCGTAACGA ATCTAAAAACAGCATCGCTCATTTTGGCGACC AAGCGAGCGAATCCATAATGCGCGAAATCTC GCCTACACTTTAGCGAAATTTACGCGGCCAGTAC AAAAGCTAGCGGAACACTATGACAGCATCAC AGCGGCGCTCTAGCTTGCTGCTGATGCGCAATC TTTACAAAATGTGGTGAGCAAAAGACTAACC CTAACAGCCCGCAAGGCATACAGGATAATTACT ACATTGACTCCAACATCCATTCTCAAGTGCAAT CTAGGAGT		QNVVSKKTNPNSPQGIQ DNYIDSNIHSQVQSR
HP1265	HP0289	6597	TTCAAGCTCTATGACTTTTTCACGCAAGCA TGGATAATTCGCAGAAATTTGAATGGTCTAAA TTCTAACGGCAAACTTTCGGTGTATGGCACCA CTTTCACTAACGAAGCTAAGATGGGAAATTC ATTTTCAATGCAGGGCAAGCGGTTTTTGAAAA CACCAACTTTAATGGAGGGAGTTACCAATTCA GCGGCGATAGCTTGAAATTTTTCAAACAACAC CAGTTCAATAGCGGTTCTGTTTGAAATTAGCGCA AAAACGCTTCGTTCAATAACGCTAACTTTAAC AACAGCGCTTCTTTTAAATTTCAATAATCTAACG CGACCACTTCGTTTGTGGGGATTTCACTAACG CTAATTCAAATTTTGCAAATCGCCGGGAACGCTG TTTTGGGAACCTCTACTAATGGCTCTCAAAATA CCGCTAATTTTAAATAATACCGGCTCTGTTAATA TTTCAGGGAAATGCAACCTTTGATAATGTGGTGT TTAATGGCCCTACGAACACGAGCGTGAAAGGG CAGGTTACTTTAAATAACATCACTTTAAAAAAC CTGAACGCCCTTTGCTCTTTTGGCGATGGGACG	6598	SSSMTFSTQSMDNSQN LNGLNSNGKLSVYGT TFTNEAKDGKFIENAG QAVFENTNFNGGSYQ FSGDSLNFNNNQFNS GSFEISAKNASFNAN FNNSASFNNNSNAT SFVGDFTNANSNLQIA GNAVFGNSTNGSQNT ANFNNTGSVNISGNA TFDNNVFNPTNTSV KGQVTLNNTLKNLN APLSFGDGT

HP1265	HP1317 (omp 9)	6599	ATTACT CTCCCGCGGTATCAAGCCGTGTTTTAG CGATCAACGCGCGGTAGGGTTGTGGAAT ACCATCGGCTATGCGTCAATGTGCGGAA CGGGAACGGCACAGAGAGTGGGCTGGCA GCGTGATCTTTAATGACCAACGAGACAGG ATCCACGCAAAATTACTTGCAACCGCTTTG AATCAACTGGCCTGGTAAAGCATGTCTA TTGATGAATTCAAAAACCTCAATGAAGCCT ATCAAAATCATCCAGCAAGCTTTAAAAATCA AAGTGGGTTTCTGAAATTAGCGGGAACGGC ACAAAAGTGAGTGTTAATTACAATTACGAATG CAGACAACTGCTGATATCAACGGCGGTGTG TATCAGTTCTGCAAGGCTAAAATGGTAGTA GTAGCAGTAGTAATGGCGGTAAATGGCAGTAG CACGCAAAACAACCGGACACCAACGCAAGAC GGCGTAACGATCACCACTACCTATAATAATA CAAAGCCACCGTCAAAATTTGACATCACCAATA ACGCTGAACAGCTGTTAAATCAAGCGGCAAC ATCATGCAAGTCTTAATACGCAATGCCCTTT AGTGCGTTCCACGAAATAACGAAAACACTCCA GGGGTGGTCAACCATGGGTTTAAGCACATC CGGGAATGCGTGACGATCTTCCAACAAGAAAT TTAGCCAGGTTACTAGCATGATCAAAAACGCC CAAGAAATAATCGCGCAAGCAAAATCGTTAG TGAAAACGCGCAAAATCAAAACAACCTTGATA CTGGAAAACCATTCACCCCTTACACGGACGCCA GCTTTGCGCAAGCATGCTCAAAAACGCTCAAG CGCAAGCAGAGATGTTCAATTTGAGCGAAACAAG TGAAAAGAAGACTTGGAAAGTCATGAAAACAACA ATAATGTTAACGAGAAATTAGCAGGATTTGGGAA AGAAGAAGTAATGACCAATTTTGTAGCGCCTTT TGGCAAGCTGCAAGATGGTGGCACA CATGTCAATAATGGTAATTTGAATGTAA AAACGCAAAATTTAGCAACCAACCCACACA TGGAGGCTTTAACCTTAAGGCCAATAACAT	6600	SPAYQAVFLAINAAV GLWNTIGYAVMCGN GNGTESGPGSVIFNDQ PGQDSTQITCNRFEST GPGKMSIDEFKKLE AYQIIQQALKNQSGFP ELGGNGTKVSVNYNY ECRQTADINGGVYQF CKAKNGSSSSSNGGN GSSTQTTATTTQDGV TTTTYNNNKATVKFD ITNNAEQLLNQANIM QVLNTQCPLVRSTNNE NTPGGGQPWGLSTSGN ACSIFQQEFQSVTSMIK NAQEIIAQSKIVSENAQ NQNNLDTGKPFNPYTD ASFAQSMKNAQAQA EMFNLSEQVKKNLEV MKNNNNVNEKLAGFG KEEVMITNFVSAFLAS CKDGGT
HP1265	HP0609	6601		6602	IVNNGNLNVTNAKFSN QTPHGGFNLKANNT WDKGSVNGGGNFGV

			TACTTGGGATAAAGGCTCTGTGAATGGAGG GGGGAATTTTGGCGTGGAATAACGCCGATAG CAATGGCGCAACCAACCAATTAGCGGAGTAAC TTTCAATAATAACGGCACTTTGATTATATAA GGGGTGAAATAAGCGCCGGAATTCCTTA ACCCTAGAAACAACACTTTCAATTCCTACA ATATCAACGCAAAAGCGCAAAACCTAATTTT TAACAACAACCTCGTTTAATGGCGGTAGCTAT TCGTTTAAATGACACTAAACACCACTTTA AAGGCACAACACGCTCATTAACAGCGATCC TTTAGCCGCTTAAGGATCAGTTTCTATTG AAATAATAGTGTTTTAAATAATTGAAAGGA TTTGACCGATAAACCACTTACACGCTTTTAA GCGGAAATAGTATCAAAATACAATAACCAAGC TTTAGCGGACAATGCTTTTCAAAAATTTA TGGAATTTAATCCATTATGGTGGCGAACAAGG GACTCTATTAAAGCGGA		DNADSNGATTISGV FNNGTLIYKGENS AGNSLTLENNTFNSY NNAKAQNLIFNNNSF NGSYSFNDTKNTTF KGTNTLNSDPFSRLK GSVSIENNSVFNIERD LTDKTTYTLLSGNSIK YNNQALAGQCFFKK FMEFNPLWWRTRDEI KSG
HP1265	HP0780	6603	GGCGGTGAAAAAATCGTTGTGAGTTGGT GTGTGGCGTTGGCTTTTAAAGCGCGAT TCAGCACAAAGCCAATAAAGCGATCAGTA ATGCGGATTTGATTAAAGAGATAAGGA TTTAAAAAATCATCATCAGCGCGCAAAAC ACTGAGATTAAACAACCTAAGAAAAGTGC AAGAAGTGTGTCTGGGCAATTAGGGGA CATGCGTAAGGATATATTAAGCACTAGA GATTATTGCATTAGCTTAAGGCCCTTATAT CTATAATTGGCGC	6604	AVKKIVVSWCVALAF LSADSAQANKAISNA DLIKEIRDLKKIISAQN TEINNLRKVQEVLSG QLGDMRKDILSTRDY CISLRPYIYNWR
HP1265	HP0792	6605	ATGATTAACACGATGTTTTGCGCGACCATGCAAG GGGAGTGGCGGAATACTGTGGCTGTGGAAGCGACT TTCACAAGGGCTTTGCGGCGTTTGTGATTTCAGG GTTAGCTAATAGCTCTATCCAAGAAAGCCAAACAG CGGGTTCAATCGGCTTTACAAAATAACGATTTCAC TTTCCCGCCTTTAAAAATCACCATCAACCTTTCCCC CTCAGATTTGCCTAAATCCGGGAGTCATTTTGATTI GCCTATCGCTCTTTTAATCGCTTTGCCAAAACAAGA GTTGGCTTTTAAAGAGTGTGTTTGTCTTTTGGGGAGTT	6606	MINTMFCAATMQRG VAEIVA VEATFTRA LPAFVISGLANSSIQE AKQRVQSALQNNDFT FPPLKITINLSPSDLPK SGSHFDLPIALLIALLQ KQELAFKEWFAFGE LGLDGKIKPNPIFPM LLDIAIKHPHAKIAP

HP1265	HP1157	6607	AGGGCTTGATGGCAAGATCAAAACCAATCCTAACAT TTTCCCCATGCTTTTAGACATTGCCATTAAACACCCC CATGCTAAGATCATTTGCGCTAAGGCCAATGAAGAG CTTTTTCGCTTATCCCTAATTTGCAATGCTTTTGT GGGCAATTTAAAGAAGCGTTAGAAATCTTGCAAAA CCCTGAACCAAGCAGACACCCACACGAAACAACT ACCCTTTAAACGATAGAAATTGAACGATAAAGAGTAT TATTTTTCAGACGCTATGCCTTAGATTTTAAAGAAG TAAGGGCAAGCTGTCGCTAAGAGAGCGCTTTGAT CGTAGCGCTGGTTTCACTTGTGATTTTAGAGGGA AGTCCAGGGTGTGGGAAAGCATGATCATTAATCGC ATGCGTTATATCTTGCTCCATTAAAGCCTGAATGAAA TCCTAGAACGACAAATTACGCAATTTAAGCGAGCA AGACAGTGCCTATTACCCCTTA	6608	NAQQQNISAYDCMTA TGSLSNASSGISC TSSTSTNSFDNSLVA TSKVQTINGKEQIGV NSFNLVSVQVWSVYN SLKTSEENLQKNANI LCANGTQSGTSSCNS SSGGLSISGNAQLQN ILSPTSGTTTNTQAKS NAPKLKAMVVVNNE EEAKTANLAQSSGTT TQSPNSTVMGALNT VLQNVSNFQQSQNA FQNESNIQAWANAI YNTNGSQSQEMTPN NNQDLRIQLRANFYQ LINTNQVPTDMNA LINQSQQTQQTSGSA SNNACASGMSGNG NWCYQQWSDSKAYY SGLQSALGYQTQATT QSGSNGNSITYNVQ	KANEELFSLIPNLQCF FVGHFKEALEILQNPE TKADTHTKKLPFKTI ELNDKEYYFSDAYA LDFKEVKQQAFAKE AALIASAGFHNILEG SPGCGKSMIINRMRY ILPPLSLNEILEATKL RILSEQDSAYYPL
HP1265	HP1157	6607	CAACGCTCAAGGGCAAAATATCAGCGCC TATGATTGCAATGCTGTACCGGAAGCC TTTCTAGCAATGCTTCTAGCGGATTTC TGCTCAGCCACAAGCTCCACAAAGTTCCAC AAATAGCTTTGACAAATCTTTAGTCGCTA CCTCCAAAGTCCAAACCATCAACGGCA AAGAGCAGATCGGCGTGAATCTTT AACCTTGTCTCTCAAGTGTGGAGCGTTTA TAATTCCTTAAACCTTCAGAAAGAAAT TTGCAAAACAAACGCCAAATATTTATGCG CTAATGGACGCAATCTGGGACAAAGCTC ATGCAATAGCTCTTCAGGGGTTTGAGCA TCAGCGGGAACGCCCAATTGCAAAATATT TTAAGCCCTACTAGTGGGACTACCACTAAT ACTCAAGCTAAAGCAACGCTCCCAACTA AAAGCGATGGTGGTGTGAATAATGAAGA AGAAAGCTAAACGGCCAATTTAGCCCAA GCAGCGGACAAACCAACAATCTCTAACA GCACGGTGATGGGAGCTTTAAACACCGTGT GCAAAATGTCAGCAATTTCCAAACAAGCAT CAAAACGCTTTTCAAAACCAAGAAAGTAATA TCCAAAGCTTGGGCGAATGCGATTTATAACACT	6607	NAQQQNISAYDCMTA TGSLSNASSGISC TSSTSTNSFDNSLVA TSKVQTINGKEQIGV NSFNLVSVQVWSVYN SLKTSEENLQKNANI LCANGTQSGTSSCNS SSGGLSISGNAQLQN ILSPTSGTTTNTQAKS NAPKLKAMVVVNNE EEAKTANLAQSSGTT TQSPNSTVMGALNT VLQNVSNFQQSQNA FQNESNIQAWANAI YNTNGSQSQEMTPN NNQDLRIQLRANFYQ LINTNQVPTDMNA LINQSQQTQQTSGSA SNNACASGMSGNG NWCYQQWSDSKAYY SGLQSALGYQTQATT QSGSNGNSITYNVQ	KANEELFSLIPNLQCF FVGHFKEALEILQNPE TKADTHTKKLPFKTI ELNDKEYYFSDAYA LDFKEVKQQAFAKE AALIASAGFHNILEG SPGCGKSMIINRMRY ILPPLSLNEILEATKL RILSEQDSAYYPL

HP1265	HP1274(pflA)	6609	<p>AATGGGAGTCAGTCGCAAGAGATGACACCTA ACAATAACCAAGATTACGCATCCAATTGAGG GCGAATTTTACCAGCTCATCAATACCATTA CCAGCAAGTGCCTACAGACATGAATGCTTTAAT TAATCAAGCCAAACAACCCAAACAAGCGG GATCAGCAAGCAATAATAACGCATGCGCGAGT GGAATGAGTGGGAGTAATGGTAACCTGGTGCT ATCAGCAATGGTCCGATTCTAAGGCTTATTAC AGCGGTTGCAAGCGCTTTAGGGTATCAAAAC GCAAGCGACAACCTCAAAGCGGGAGCAATGGTG GGAACAGCATCACCTACAATGTCCAACAATC ACGCTCACTAGTAATGGTTTGCTCAACCAATC ATCACA</p>	6610		QITLTSNGLLNQIIT
			<p>GCTCCTCAATCAAGATGATGATCTG AAAGCTAAAGAGCAAGCGCTTTATG ATTTAGGAGCGTTGTATGCAAGGATC AAGGACTTTAAACGCCCCACCTTTAC AATCTGCAATATTTGCAGGACCATGCG GAACTGGATAAAGCTTCTGTCGTTAGG GCGCGGATGAAAAGCCCTTTTTC ATGGAGGGGAACACGCAAGAAAAAT CGCCCACTATGACAAAATCATTCAAAAT TTCCCTAATTCTAATGAAGCCCTAAAGG CITTAGAATTGAAAGCCCAACTATTGT TGAAAACAAGCGTTATGCTGAAGTGTTA AGCATGCAAAAATAATTGCCTAAAGATT CCCCTTGATCCAAAACGCTCAATGT CCTTGCTAAACCCCATTAGAGAACCAT CGTTGTGAAGAGCCTTAAATATTAT CCCAAATCACAACCTTTGAATTCAGCCC CAAAGAAGAAATCCAAGCCTTTGATTGC TTGTATTTCCGCATCGCTCAAGAAAAAG CGCAAATCATTTGCCCTAAACGCTTTTAA AACGGCTAAAGCCCCTAGCGAGAAATTA ATATGGCTTTATCGTTTGGGGCGCAATTA</p>			LLNQDDDLKAKEQ ALYDLGALYARIKD FKNAHLYNLQYLQ DHAELDKASVVRA RDEKALFSMEGNTQ EKIAHYDKIIQNFPN SNEALKALELKAQL LFENKRYAEVLSM QKNLPKDSPLIQKTL NVLAKTPLENHRC EEALKYLSQITTFE FSPKEEIQAFDCLY FASLKEKAQIIALN AFKTAKAPSEKLI WLYRLGRNYYRL GDFKNSTLASKD ALILAQSLNKKEFY DIAFVLFSDYMQNN EKELALHLYAFLEK HFKGDKRMALVYF KLLENEKDPKSVKIY ATSLKLQDAYKDY

HP1265	HP1379(lon)	6611	CTACCGCTTAGGGGATTTTAAATTC CACTCTGGCCTCTAAAGACGCTTTAAT TCTCGCTCAAAGCTTGAATAAAAGA ATTTATGATATTGCTTTTGTATTATT CAGATTACATGCAAAACAATGAAAAAG AATTGGCTCTCCATTGTATGCGTTT AGAAAAGCATTTCAAAGGCGATAAAC GCATGGCGCTAGTTTATTTTAAATTGCT AGAAAATGAAAAGATCCTAAAGCG TCAAAATTTATGCCACAAGCTTGCTCAA ACTCCAAGACGCTTATAAGGACTATT	6612	NDDPNRIADLIAAA LHLKKDQAYSLFA NNNTEQRLDLIDIV IEETKTQKLQKEIKS KVHQKMEQTNKEY FLKEQLKQIQKELG TDKQRDEDLNQYY QKLESIKPFLEEAF KEIKKQIDRLSRTHA DSSDSATLQNYIETM LDVPFGQYGGKALD IKHVREQLDKDHYS LKRPKERIVEYFATM QLEMRRRKKKPEK KDKTKGTILCFYGGP GVGKTSLANIAKAI ERPLVRJALGGLEDV NELRGHRRRTYIGSMP GRIVQGLIEAKKMN
			CAATGACGATCCTAACCGCATCGCTG ATTTAATCGCAGCGGCTTGCAATTTAA AAAAAGATCAAGCGTATTCTCTTTTG CCAAACAACAACCGAACAGCGTTTGT TGGATTTGATTGATATTGTGATAGAAGA GACTAAAACCCAAAACCTCCAAAAAGA AATCAAAATCCAAAGTCCATCAAAAAT GGAGCAAAACCAATAAGGAATATTTCTTA AAAGAGCAGCTCAAAACAATCCAAAAA GAGCTTGGCACAGACAACAGCGAGATG AAGATTTAAACCAATACTACCAAAAACT AGAAAGCATCAAGCCTTTTAAAGAA GAAGCGTTTAAGGAGATTAAAGCAAA TTGACCGGCTGAGCCGAACCCATGCGGAC AGCTCGGATAGCGCGACTTTACAAAATTAT ATTGAAACCATGCTGGATGTGCTTTTGGG CAATACGGGAAAAGAGCGCTTGACATTAA GCATGTGAGAGAAACAACCTAGACAAGGATC ATTATTCTTTAAAGGCCCTAAAGAGCGCA TTGTAGAAATACCTTTGCCACCATGCAGCTTT TAGAAATGCGCGCAAGAAAAGCCAGA AAAAAAGACAAAACCTAAGGCACGATTT TATGCTTTTATGGCCTCTCTGGCGTGGTA AAACAAGCTTAGCTAAATTCATCGCTAAA GCGATAGAGCGCCCTTTAGTTCGGATCGCT		

HP1265	HP1489	6613	TTAGGGGATTAGAGATGTGAATGAATT AAGAGGCACAGACGCACTTATATAGGCT CAATGCCCTGGGCGCATTTGTCCAAGGGCTT ATTGAAGCTAAAAGATGAATCCG AGAAAATCAGATTCAAATCTCTAAA GAAACACAGAAATTACAGATCGCTA AATTCTTGCCCAAGTGAGTTTTT GGCTCTTATATTATGAAGCAAAACAA TTCGGTGTTTGAAGACATGATCCCTAG TTGGTTTGTGGCGTGGCCGGCGCA TGCCTATTCTTCTCCACAGGGCGCA TTCAAAATAACCAAGCGAGCAAAATTA GCGGAGTTGCAAGTGAGTAGCGAACA AATCCAGGCTAAAAAACAATGGAAT TATTAGTGAATAAGACTTATAAAGAGA CGCTTCTTATTGAAAGAATACAAA GCTTGTCTTCTAGCGTGGAATTAGCCAA GGAAAACCTTAAACTCCAAGAGCAGGC TTTTTTACAAGGCTTAAGCACGAACGCT CAAGTCATTGATGCGAGGAACACGCTT TCTTCTATCGTCGTGGAGCAAAAAGCG TGGCTTATAAATACATCGTTTCATTAGCG AATTTAATGGCGTTAAGCGATCATATTGA TTTTATTATGAATTTGTTTAT	6614	ENQIQSKENTKLQ IAKFLPQVSFFGSY IMKQNNNSVFEDMI PSWFGVAGRMPI LSPTGRIQKYQASK LAELQVSSEQIAK KNMELLVNKTYKE TLSYLKEYKSLSS VELAKENLKLQEQ FLQGLSTNAQVIDA RNTLSSIVVEQKSV AYKYIVSLANLMA LSDHIDLFYEFVY
HP0659	HP0599 (hyIB)	6615	GCTAGCGGACTCTCTCAACCAACGG AGCAATGAATACTCACTCAAGTCAATTTC TTTGATTGATGATATTGCAGAACAAA CCAATCTATTAGCCCTAAATGCCGCT ATTGAGCGCGCGAGCGGGCGAGCA TGGGAGAGGGTTTGCGGTGGTGGCTGAT GAGGTGAGAAAACCTCGCTGAAAACCC AAAAGCCACTAAAGAAATCGCTGTTGT CGTTAAAAGCATGCAACAAGAGCGAA CGATATTCAACCAATACCCACGATATT AATTCTATTGTAAGCTCTATTAAAGGGCG ATGTGGAAGAGCTTAAATCCACCGTAAA	6616	LADSLNQRSNEIT QVISLIDDIABQTN LLALNAIEAARA GEHGRGFVVVADE VRKLAETQKATK EIAVVVKSMQQE ANDIQTNTHDIN SIVSSIKGDVEELK STVKNNMIVAQA AKYTTYNNNRV FCGLAKLDHVVF KNNLYGMVFGLN

HP0659	HP0655	6617	AAATAACATGATTGTTGCGCAAGGGCA AAATACACCATCTACAATATCAATAACC GGGTGTTTGGCGTTTGGCCAAACTTGA TCATGTGGTCTTTAAACAATCTTTATG GCATGGTTTGGTCTCAATTCCTTTGATA TTACCAGCCATAAGAAATTGCCGTTTAGGC AAATGGTATTATGAGGGCGCGGCAAGA GAATTTTCCAAACACTTCAGGCTATAGAGC TTTAGAAAGCCACCATGCAAGCG AAAGATTCTGTGGCGGATATTGTGGAT TCTAAAAAATAGACACCGCTGTTTGG CTTGTTCAAATCAAGGTAATTTTAAAGA CGTTATGCCACTTTTGAAGCGGCATAT TAGAGTTTCATTTTGATGAAAAGCCAGG ATTGCCGGGTAGAAATCAAGGTTATGG GACTGAAAAGGAAAAGACGGCTTAA ATCCCAAATGGGGATCAAAAAGGGCGAC ACCTTTGATGAGCAAAAATTAGAGCATGC TAAACGGCTTTAAACCGCTTTAGAGG GGCAGGGCTATTATGGGAGCGTGTGGAG GTGCGCACAGAAAAGGTCAGTGAGGGTGC ATTATTGATCGTGTGTTGATGTGAATAGGG GGATAGCATTTATATCAACAATCCATT ATGAGGGAAGCGGAAATTAACAGCC GCATGATTGAATCTTTGAGTGCGAACAAGC AACGAGATTTCATGGGCTGGATGTGGGC TTGAATGACG	6618	KIRVGDIVDSKKIDTA VLALFNQGYFKDVYA TFEGGILEFHFDEKARI AGVEIKGYGTEKEKDG LKSQMGIKKGDTFDEQ KLEHAKTALKTALEGQ GYGVSVEVRTEKVSE GALLIVFDVNRGDSIYI KQSIYEGSAKLKRRMIE SLSANKQRDFMGWMW GLND	SFDITSHKNCRLG KWYYEGAGKEN FSNTSGYRALES HHAS
HP0394	HP0489	6619	TTTCAATACGAGCATGCGCACCAACG AGCAAGAAAGTAAGTGCTACTTTAAAC GCTAACACCGAAACATCAAAAGCGA GATTAAAAGCTAGAAAATCAATTGA TAGAAACCACTACAAGGCTTTTAACGA GCTATCAAATCTTTTAAACAACGCTA GGGATAGCGCTAACAAATCAATCACG GCTAACAAACCGAAAGCCTTGAAGC GCTAAACCAAGCGAAACAAGTGCTA	6620	FNTSMRTNEQEVSA TLNANTENIKSEIKK LENQLIETTTRLT'S YQIFLNNARDSANN QITANKTESLEALNQ AKT'SANNEITANQTQ ALTNINEAKENANNQ ITENKTQAITNINEAR ESA'TTQITTNKQEVLN	FNTSMRTNEQEVSA TLNANTENIKSEIKK LENQLIETTTRLT'S YQIFLNNARDSANN QITANKTESLEALNQ AKT'SANNEITANQTQ ALTNINEAKENANNQ ITENKTQAITNINEAR ESA'TTQITTNKQEVLN

HP0394	HP0257(cag7)	6621	ACAACGAAATAACCGCTAATCAAACG CAAGCGCTAACTAACAATTAAACGAAGCA AAAGAAACCGCTAACAAATCAAATAACC GAAATAAACCCCAAGCGATAACTAAC ATTAAAGGAGCGAGAGAAAGTGCTACA ACGCAAAATTACCAACCAATAAGCAAGAA GTTTAAACAGCATCACGCAAGAGAAAG AATCAAGCCACAAGCGAGATTACTGAA GCGAAAAAGAGCGCATTTAACGAACTT TTAGAGACCCCTAAAGCCGAAGTTTAGC GGCTTGTTGCGGGGCTTACTATATTC GCAATGTGATTATATTCAAGGCGGATGG GAGAAGAAAGTCAAGGATT	6622	SITQEKNQATSEITEAK KSAFNELLETLKPKFS GLFAGAYYIRNVIIFK ADGRRKSRI
HP0394	HP0257(cag7)	6621	TGCCACTATTAAACGCCACTAATG TTGATCGGACAAATAAGCTAGCG ATAATCCTATTTATGCTTCCATAG AGCCTGATATTGCCAAGCAATACG AAACAGAAATAACCAATTAAGGATA AGAAATTTAGAGCTAAATTAGCT AAGGCTTTAGGTGGCAATAAAA AGATGACGATAAAGAAATAAGTA AAAAATCCACAGCAGAAAGCTAAA GCAGAAACAAATAAGATAGACAAA GATGTCGCAGAAACTGCCAAGAAT ATCAGTGAAATCGCTCTTAAGAACA AAAAAGAAAGAGTGGGGAATTIG TAGATGAAATGGTAATCCCATTTGA TGACAAAAAGAAAGCAGAAAAAAC AAGATGAAACAGCCCTGTCAAAC AGGCCTTTATAGGCAAGAGTGATCC CACATTTGTTTAGCGCAATACACC CCCATTGAAATCACTCTGACTTCTAA AGTAGATGCCACTCTCACAGGTATA GTGAGTGGGTTGTAGCCAAAGATG TATGGAACATG	6623	ATINATNVDA DKIASDNPIYA SIEPDIKQYE TEKTIKDKNL EAKLAKALGG NKKDDDDKEKS KKSTAEAKAE NNKIDKDVAE TAKNISEIALK NKKESGEFV DENGNPIDDKK KAEKQDETSPVK QAFIGKSDPTFVLA QYTPIEITLTSKVD ATLTGIVSGVVAK DVWNM
HP0394	HP0693	6623	CCTTTAAGCGTTGCCACCCAAAATGA	6624	IAKNVKGVDYRLL

			AAATCTATCCAAATAAGCGCTGGGG TGATTGAAAAGCTATCCCTATCAGT CAGACGATTTTTCITCTTATAATTA ATCATTATAGGATCATCTTGTAGG GTTACCCCTTTTAAATGGCAATGATCC ACCCTAAAAAGAAAGAAATCGTTGA GATTGATTCAAAGCTTTTAAAGACG AGTACAAAGAGATTGAACTCATTAGCC ACCAACAAGACAAAACGATCGCGCAT TTTTTGGAAACAGCGCTTTGCTTCTT ATCTTTTGGTTTTTTTGGTTTTGGGTA TCTTGGTGTTTATTTTTTTTAAAGGGGA GGGATTAGTTAAACATTTGTCAATACG ATTTTCCTTTTTTTAGGGAATTTACTGC ATAAAACCCCTTTAGCTTATGTGAAAG CGATCGATCGTTCGCTAGGAGCGTGG CTGGGATTTTATTGCAATTCCCTTTTA CGCTGGGATTATGGGGATGATGGCAAG CCATAGCGTGGGGGTCAATCTTTAGC GCAAATGCTTTCTTTAGCTTTCACGCAC ATCGCTAATGAAAAAACTTTCGTGCTC ATGACTTTTTTGAGCGCAGGGAATTGTC AATATTTTTATTCCGTCTGGCGGAGGGC AATGGCGATTCAAGCTCCTATCATGC TTCCGGCTGGGCAAGCTTAGGGGTGG ATCCGGGAGTGGTTTCTATGGCTATCGC TTGGGGAGATGCTTGGACGAATATGAT ACAGCCTTTTTGGGCTTTGCCCGCTTAG CCATTGCGGGTTTGGGCGCTAAAGATA TTATGGGCTATTGCGTTTGTGACTTTAATT TTGTAGGCTTAGTCTGTGTGGGGTGT TTTATTTTTTAGTG			IASAYSGFVIWHGG LSGSIPLSVATQEN LSKISAGVIEKAIPIS QTIFSSYNLIHGHILV GLPFLMAMHPKKE EIVEIDSKLLKDEYK EIELISHQQDKTIAHF LENSALLSYLLVFLG FGYLG VYFFKGGGI SLNIVNTIFLFLGILLH KTPLAYVKAIKDRSAR SVAGILLQFPFYAGIM GMMASHSVGGHSLA QMLSLAFTHIANEKT FVLMFTFLSAGIVNIFIP SGGGQWAIQAPIMLP AGQSLGVDPGVVVSMA IAWGDAWNTNMIQPF WALPALAIAAGLGAK DIMGYCVLTLIFVGL VVCGVFYFLV
			ATGCAAGTTTATAGCGTTAAATAACC GCCCAAACAATTTAGCGAGCTAGT CGGTCAAGAGAGCGTGGCTAAAAC GCTTTCITTAGCCCTAGACAACCCAG	6635	6636	MQVLALKYRPHF SELVGQESVAKTLS LALDNQRLANA YLF SGLRSGKTSSTRIFA
HP0394	HP0717(dnaX)	6635				

			CGTTTGGCTAACGCTTATTTATTTCAG CGGGTTAAGAGGCTCAGGAAACC AGCTCTTCTAGGATTTTGTAGGGC TTTAAATGTGTGAAGAGGGCCAAAG GCTGTGCCTTGGGATACCTTGCAATCCA ATGCCAGAGCGCTTTAAACAACACCACC ACATAGATATTATAGAAATGGATGGG GCGTCTAATAGGGGATTGATGATGT CCGTAATCTCATAGAGCAAACGGCGT ACAAACCAAGCTTTGGCGCTATAAA ATCTTTATCATTTGATGAAGTGCATAT GTTCAACCAAGCTTTGAGAGCGCTCCTA TTTTAAAGACTTTAGAGAGCGCTCCTA GCCATGTGAAATTCCCTTTTAGCGACAA CAGACGCTTGAAACTGCCCGCTACCA TACTCAGCGCACCCAGCATTTTCAGGTT TAAATAATCCCTGAAATTTCCGTTAT TTCTCATTTAAACCAATTTTAGAAAA AGAACAAAGTGAGTTATGAACAACGCG			RALMCEECPKAVPCD TCIQCSALNNHHIDI IEMDGASNRGIDDVR NLIEQTRYKPSFGRYK IFIDEVHMFTEAFNA LLKTTLEPPSHVKFLL ATTDALKLPATILSRT QHFRFKKIPENSIVISH LKTIKEQVSVYETSA LEKLAHSGQGSLRD TITLLEQAINYCDNAI TESKVAEMLGAIDRS VLEDFQSLINQDEAR LKERYAILENYETESV LEEMMLFLKAKLLSP DFYSILLIERFFKIIMS SLSLLKEGANASFVL LLLKMKFK
			CGTTAGAAAACTGGCTCACAG CGGGCAAGGAGCCTAAGGGAT ACGATCACTCTTTTAGAACAAAGC CATCAATTATTGCGATAACGCTAT CACAGAAAGCAAGTGGCTGAAAT GTTAGGAGCGATTGACAGAAAGCGT TTTAGAAGATTTTTCCTCAAGCCTA ATCAACCAAGATGAAGCGCGATTA AAAGAGCGTTATGCCATTTTAGAAA ATTATGAACCGAGAGCGT TTAGAAAGAAATGATGCTTTT TTTGAAAGCGAAATTATTGA GCCCTGATTTTATTCTATCC TTTTGTATAGAGCGCTTTTAA ATCATTATGAGCAGTTTGAGCCT TTTAAAGAGGGGCAATGCC			

HP0394	HP0439	6637	AGTTTGTGCTGTTGTTATTGAA AATGAAATTCAAA AAATCTTTAAAGCAGACAACA CAGAAATTTAAAGAGAAATCAA GACACTAAAGAAACAGCCTAA CGATTTGTTTCTTTGCCATTGCC ACTCAAACCAACCATCAATGGAATT AAAGAAATTTGTAGAGAGCCTGTG ATAGAAACAGAGAAATAAGAAC ATCCCAAATGAGCCAATCCAAGA AAAAAAGAAAGAAATTTTAAAAA CTTTTCTCCAGATAGGCTTTGATA AAAGTATTGCCCTACAATGCTTTT GAAGAAAGTGAGAGATGCAAGCGTTA TCTATCATTTAGAGAAATAATAGGC GATTATATCTTTTATGTAGCGTGT CTTCTTTGGCACAAACGGCATTGCTTA TTATCTTACTGACTATTCTGTGGCCC TTAAAAACAATAAGAGCCGTATTAG TGCAATTTTCTAACAATAAGAAAA TTTTGCTTTAGTTCAAAAGGCAGATA GCAGCATTACAGCCCAATAAGCTCTT ATTCGTTTCAATTAGTGGAGCGTATGT GCTAAACAGGGAAAGCATTAATCATA TTGAGCAACATGAAATAATGCGTCAA AACACCATTAAGAGCAAGTTCCAA TGAAGTATGGTATGAATTTGAAAACT CATCGCTCATTATGACAGCATTTACAC TAATCCTTTACTCAAGAAAGTAA GATTGCAAATATTTACTTAGATAAAGAT TTAGCCTATATTGACATTGAAGTGAGCT TGATCATAGTGGAGAAATTAGAGAGCTT GAAGCGCTATAAGTGGTGATGAGTTT GAATTTAAAAACAAGAAATCAATTTG ACTCCATGTCTTTAAATCCTACAGGCTT TATGGTTACAAAGTTATGATGTAAGTAA	6638	NLKADNNTEFKEENQ DTKENQPNDFSLPL PTQTTINGIKEFVEEP VIETEKKETSONEPIQ EKKERIFKNFFSRIGF DKSIAPTMLFEEVRD ASVIYHLEKKLGDYI FYVACFFFGTTALLI LLTILLPLKQKEPYL VQFSNNKENFALVQ KADSSITANKALIRS LVGAYVLNRESITHI EQHEKMRQNTIKEQ SSNEVWYEFKELIAH YDSIYTNPLLTRKVK IANIYLDKDLAYIDIE VSLYHSGELESLEKRYK VVMSEFEKKQEINFD SMSLNPTGFMVTSY DVTETIAIVNYPTAKA IGLFLAS
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HP0394	HP103(tlpB)	6639	ATTGCGATTGTGAATTACCCAACCGCTA AAGCGATTGGGCTTTTCTTGCTTCA TTTTGATGAATAACACCCACGAAATT ATTCCTTTGGATACTGACAGCGAC GATAGCGCTAGTGGTTTGTACGCT CATATACGCTAAATTAAGGATCGT GAAACGCATTGATGAACTGGTCCT TAAATCAACGCTTTTAGCCGTGG GGATAAGGATTGAGAGCCAAAT TGATGTGGGTGATCGCAACGATGA AATCTCGCAAGTGGGCCGTGGGAT CAATTTGTTGTGGAAACGCCCGC TTGATTATGGAAGAGATTAAAGG ATTTCCACCCTCAATAAACTTCAA TGGATAAATTAGTCCAAATCAGCA AGAAACCCAAAGAGCATGAAAGA TTCCTCAACCAACCCTAAATTCCGTGA AAATAAGCCACTGATATAGCGA GCATGATGAATGCTTCCATAGAGCA ATCTCAAGGGTTAAGGAAGCGTTTG ATTGAAACGCAAGGGCTGGTCAAAG AGAGCAAGGATGCGATCGGGGATTT ATTTCTCAAAATCACAGAGAGCGCGC ACACTGAAGAGGAACCTCTTAGC	6640	FDENTTKLFLWILT ATIALVVLTLIYAK LRIVKRIDELVLKIN AFSRGDKDLRAKID VGDRNDEISQVGRG INLFVENARLIMEEIK GISTLNKTSMDKLVQ ITQETQKSMKDSSTT LNSVKNKATDIASM MNASIEQSQGLRKR LIETQGLVKESKDAI GDLFSQITESAHTEE ELSS
HP0394	HP0599(hyIB)	6641	GGACTCTCTCAACCAACGGAGCAAT GAAATCACTCAAGTCAATTCTTTGAT TGATGATATTGCAGAAACCAATC TATTAGCCCTAAATGCCGCTATTGAG GCCGCGGAGCGGGCGAGCATGGGAG AGGGTTTGGGTGGTGGCTGATGAGG TGAGAAACTCGCTGAAACCAACCCAA AAAGCCACTAAAGAAATCGCTGTTGT CGTTAAAGCATGCAACCAAGAGCGGA ACGATATTCAACCAATACCCACGAT ATTAATTCTATTGTAAGCTCTATTAA GGCGGATGTGGAAGAGCTTAAATCC	6642	DSLNRQSNEITQVI SLIDDIAEQTNLLA LNAAIEAARAGEHG RGFAVVADEVKRL AEKTQKATKEIAVV VKSMQQEANDIQTN THDINSIVSSIKGDV EELKSTVKNNMIVA QAAKYTTIYNINRV FCGLAKLDHVVFKN NLYGMVF

HP0394	HP0609	6643	ACCGTAAAAATAACATGATGTTGC GCAAGCGGCAAAATACACCATCTACA ATATCAATAACCGGGTGTGTTGCGGTT TGGCCAAACTTGATCATGTGGTCITTA AAACAATCTTTATGGCATGTTTITGG CGCTTACACGCTCTTTAGCATGAA AAATGGCTCTATCACCTATAATGA TGTCATAAATATGGAATATCAT CAGGCTTAAACACGCAAGCCAC AAAGACGCTGATAAAATCATACA AGTTCAAATAACAACACCCACACTTA CTATGTAACTTACAAATTTAGCGGCA CGCTTTATAATTCAGACAAATTTTAA GCCCTGATCTATGTTTGGCAATCTG TCTATTATGGCGGAACAATCTTTACT ACACCAATAGCGTGAATATCCATGAT AATGTTTTTAATTTAAAAAATATTA TGATGATAAAGCTGACACGATTTTCTA CCTCAATGGCTTAAACACTTGGAATTA CACTAATGCGAGATTCACTCAAAACCTA TGGCGGGAATAACAGCGCTTTAGT CTTTAACGCTACGACCCCTTGGGCT AATGGCAGCATCCCTAAATCTAACA GCACGGTGCGTTTGGGGGTATGA GGGAGTCAATTGGGGGAAACGGGC TATACTGCGCACTTTCACAGCCGA TAGGGTTTATATCACCGGTAAACATGA TGACTGGTAACGGCGCTCAACCGG TGGGGGGCGACTTTGAAATTTGTGG GCGCGACTGAAATTAATATCGCTGGA GCCACTTTTAAACCTAAACACAC TTCACAAACTCTTACATGACTTTTA TGGCATTAGGGGATAGCTCTGGGAGC GCTAAGATCAATGTTTCTCAATCTGAT TTTTACGATTGGACGGGTGGGGGTAT	6644	AYTLFSMKNGSITY NDVNNLWNIIRLKN TQATKDADKNHTSS NNNTHTYVVTYNLG GTLYNFRQIFSPDSIV LQSVYYGANNLYYT NSVNIHDNVFNLKN INDDKADTIFYLNLG NTWNYTNARFTQTY GGKNSALVFNAATTP WANGSIPKSNSTVR FGGYEGVNWGKTG YITGTFTADRVYITG NMMTGNGAQTTGGG ATLNFVGATEINIAGA TFKNLKTTSQNSYMT FMALGDSSGSAKINV SQSDFYDWTGGGYD FTGNGVFDSDVNFNK AAYKFQGTENSYNF KNTNFLAGNFKFQG KTTIEKSVLSDASYT FDGTNNNTFTEDKFN NGSFNFSHAQTD FNNNSFNNGGSFSFN AKQVNFSGNSFNNGG VFNFNTPKVSFTD DTFNVNNQFKINGT QTTFTFNKGVVFNFM QGLLSSLVGTITYQ LL
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				<div>GATTTACCGGTAATGGCGTTTGTGATA GCGTGAAATTTCAACAAGGCTTATTACA AATTTCAAGGCACTGAAAATTCTTACAA TTTTAAACACGAACTTTTAGCAGGG AATTTAAGTTTCAGGGCAAGACCACCA TTGAAAAATCGGTTTAAAGCGACGCTTCT TACACTTTTGATGGCACGAATAACACCTT TACTGAGACAA GTTTAATAATGGCTCG TTTAATTTTAGTCATGCAGAGCAGACAG ACGCTTTTAATAACAACCTCGTTTAATGGC GGTTCGTTTAGTTTACGCCAAGCAAGT AAATTTTAGTGGAACTCGTTCAATGGGG GCGTGTTTAATTTCAATAATACCCCTAAA GTCAGTTTCACTGATGACACTTTTAAATGT GAATAACCAATTCAAAATAAATGGTACT CAACAACTTTCACTTTTCAATAAGGCGT TGTTTCAACATGCAAGGGCTTTTGAGCA GTTTAAGCGTAGGCACGACTTATCAATTG CTTA</div>		
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CLAIMS

What is claimed is:

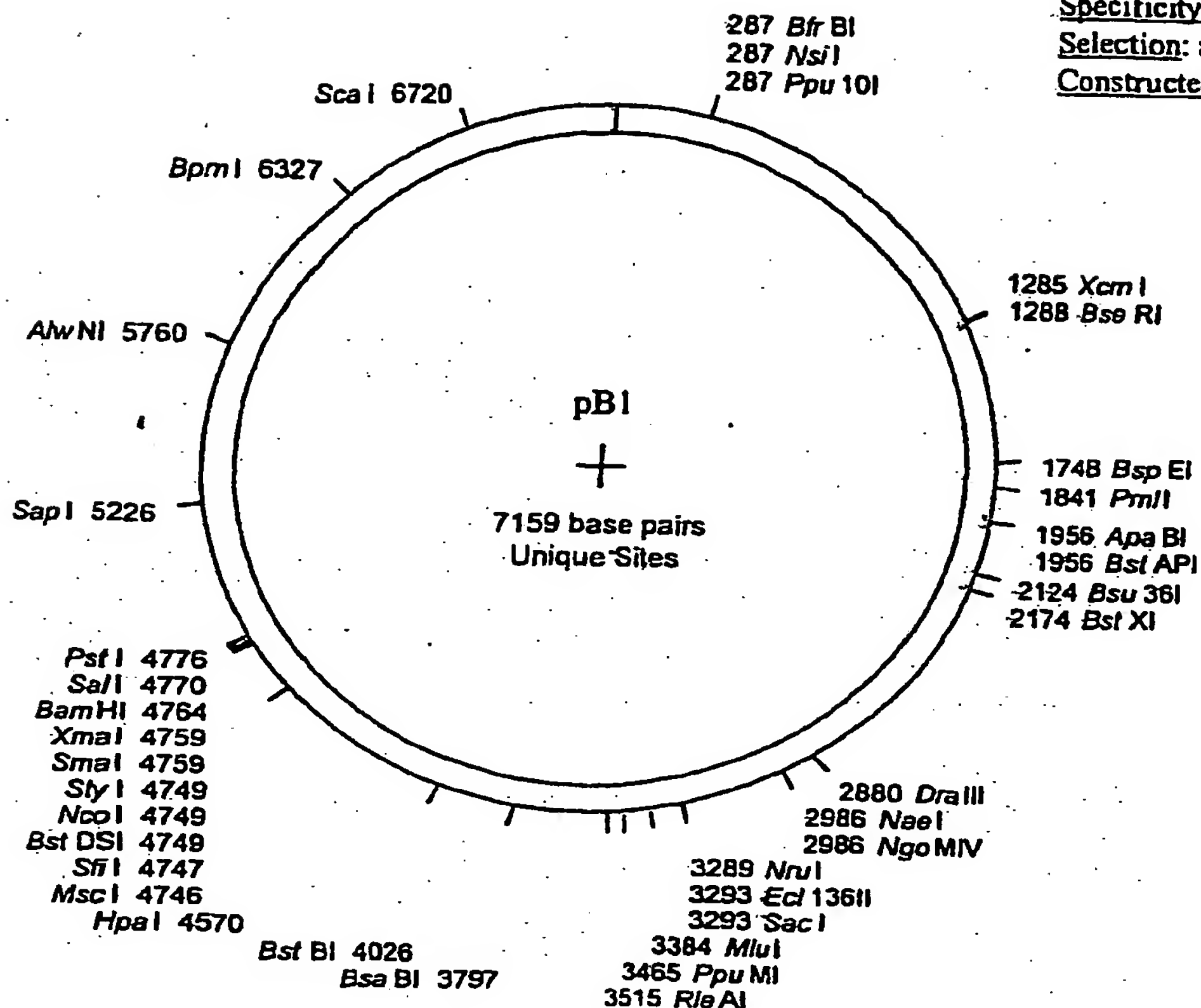
1. A complex of protein-protein interactions in *Helicobacter pylori* as defined in Table 1 and Table 8.
2. A complex of polynucleotides in *Helicobacter pylori* encoding for the polypeptides defined in Table 1 and Table 8.
3. A recombinant host cell expressing the interacting polypeptides in *Helicobacter pylori* defined in Table 1 and Table 8.
4. A method for selecting a modulating compound in *Helicobacter pylori* comprising:
 - (a) cultivating a recombinant host cell on a selective medium containing a modulating compound and a reporter gene the expression of which is toxic for said recombinant host cell wherein said recombinant host cell is transformed with two vectors:
 - (i) wherein said first vector comprises a polynucleotide encoding a first hybrid polypeptide and a DNA bonding domain;
 - (ii) wherein said second vector comprises a polynucleotide encoding a second hybrid polypeptide and an activating domain that activates said toxic reporter gene when the first and second hybrid polypeptides interact;
 - (b) selecting said modulating compound which inhibits the growth of said recombinant host cell.
5. A modulating compound obtained from the method of Claim 4.
6. A SID® polypeptide in *Helicobacter pylori* comprising the even SEQ ID Nos. 2 to 3256 in column 3 of Table 2, even SEQ ID Nos. 6590 to 6594 in Table 7 and even SEQ ID Nos. 6596 to 6644 in Table 8.
7. A SID® polynucleotide in *Helicobacter pylori* comprising the uneven SEQ ID Nos. 1 to 3255 in column 2 of Table 2, uneven SEQ ID Nos. 6589 to 6593 in Table 7 and uneven SEQ ID Nos. 6595 to 6643 in Table 8.
8. A vector comprising the SID® polynucleotide in *Helicobacter pylori* comprising the uneven SEQ ID Nos. 1 to 3255 in column 2 of Table 2,

uneven SEQ ID Nos. 6589 to 6593 in Table 7 and uneven SEQ ID Nos. 6595 to 6643 in Table 8.

9. A fragment of said SID® polypeptide according to Claim 6.
10. A variant of said SID® polypeptide according to Claim 6.
11. A fragment of said SID® polynucleotide according to Claim 7.
12. A variant of said SID® polynucleotide according to Claim 7.
13. A vector comprising the SID® polypeptide according to Claim 11.
14. A recombinant host cell containing the vectors according to Claim 8.
15. A pharmaceutical composition comprising a modulating compound of claim 5 and a pharmaceutically acceptable carrier.
16. A pharmaceutical composition comprising a SID® polypeptide of claim 6, and a pharmaceutically acceptable carrier.
17. A pharmaceutical composition comprising the recombinant host cells of claim 14 and a pharmaceutically acceptable carrier.
18. A protein chip comprising the polypeptides of claim 6.

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pB1



Alias: pAS2DD

Application: 2HY (bait)

Backbone:

Specificity:

Selection: ampicillin

Constructed by:

Oligo 160

gagagtagtaacaaaggctc AAAGACAGTTGACTGTATCGCCG GAA TTT AT

Sfi I
Sma I
BamHI
Sal I
Pst I

G GCC ATG GAG GCC CCG GGG ATC CGT CGA CCT GCA GCC

Nco I

Oligo 161

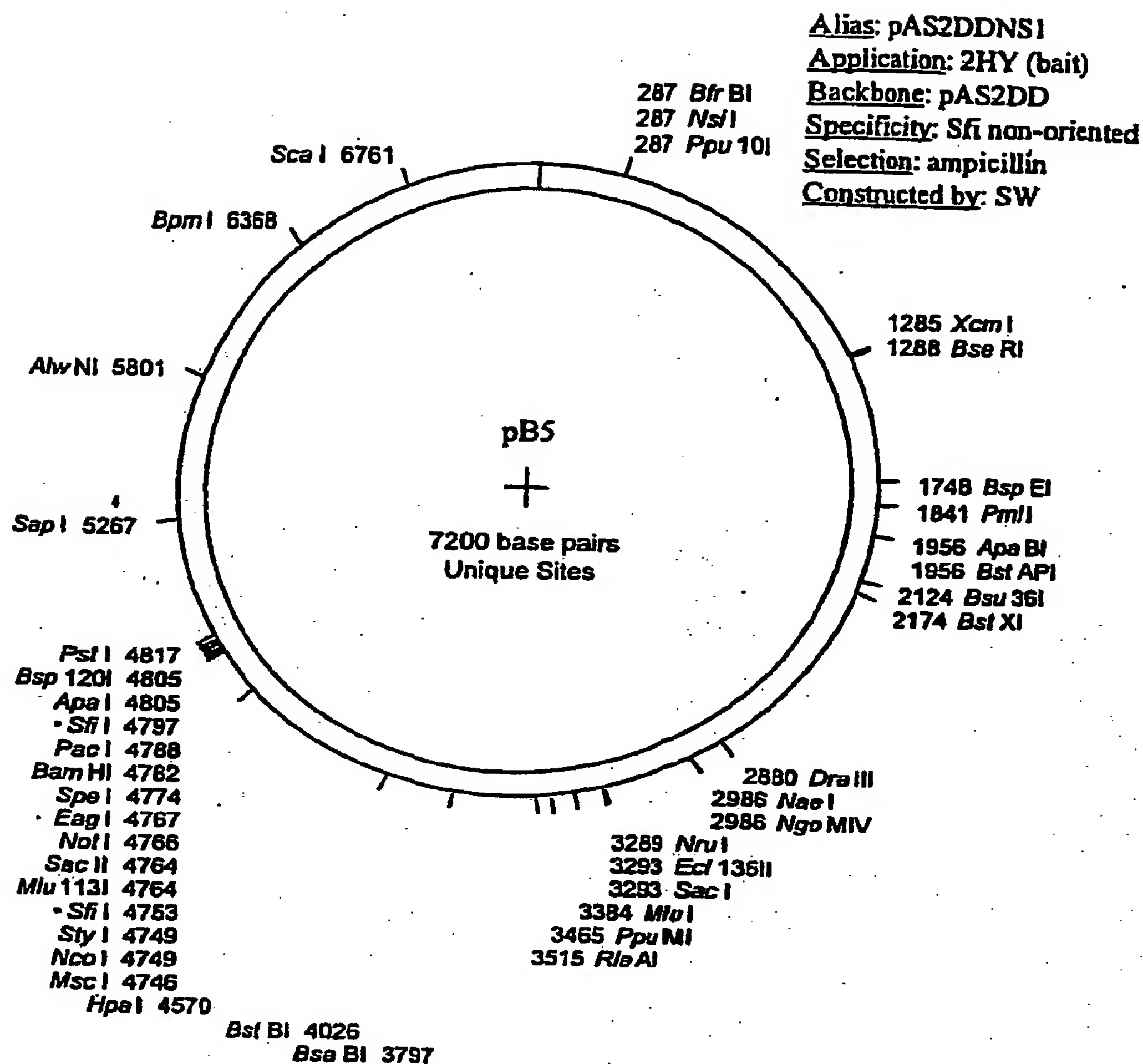
AAG CTA ATT ccgggcgaatttcttatg

Oligo 160 5' GAGAGTAGTAACAAAGGTC 3'
 Oligo 161 5' CATAAGAAATTCGCCCCGG 3'

FIGURE 1

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pB5



Oligo 160

gagagtagtaacaaaggctc AAAGACAGTTGACTGTATCGCCG GAA TTT ATG

Sfi I Sac II Spe I Bam HI
 GCC ATG GCC GCA GGG GCC GCG GCC GCA CTA GTG GGG ATC C
 Nco I Not I

STOP Sfi I Pst I
 TT AAT **TAA** GGG CCA CTG GGG CCC CTC GAC CTG CAG CCA
 Pac I

Oligo 161

AGC TAA TT **ccgggcgaatttctatg**

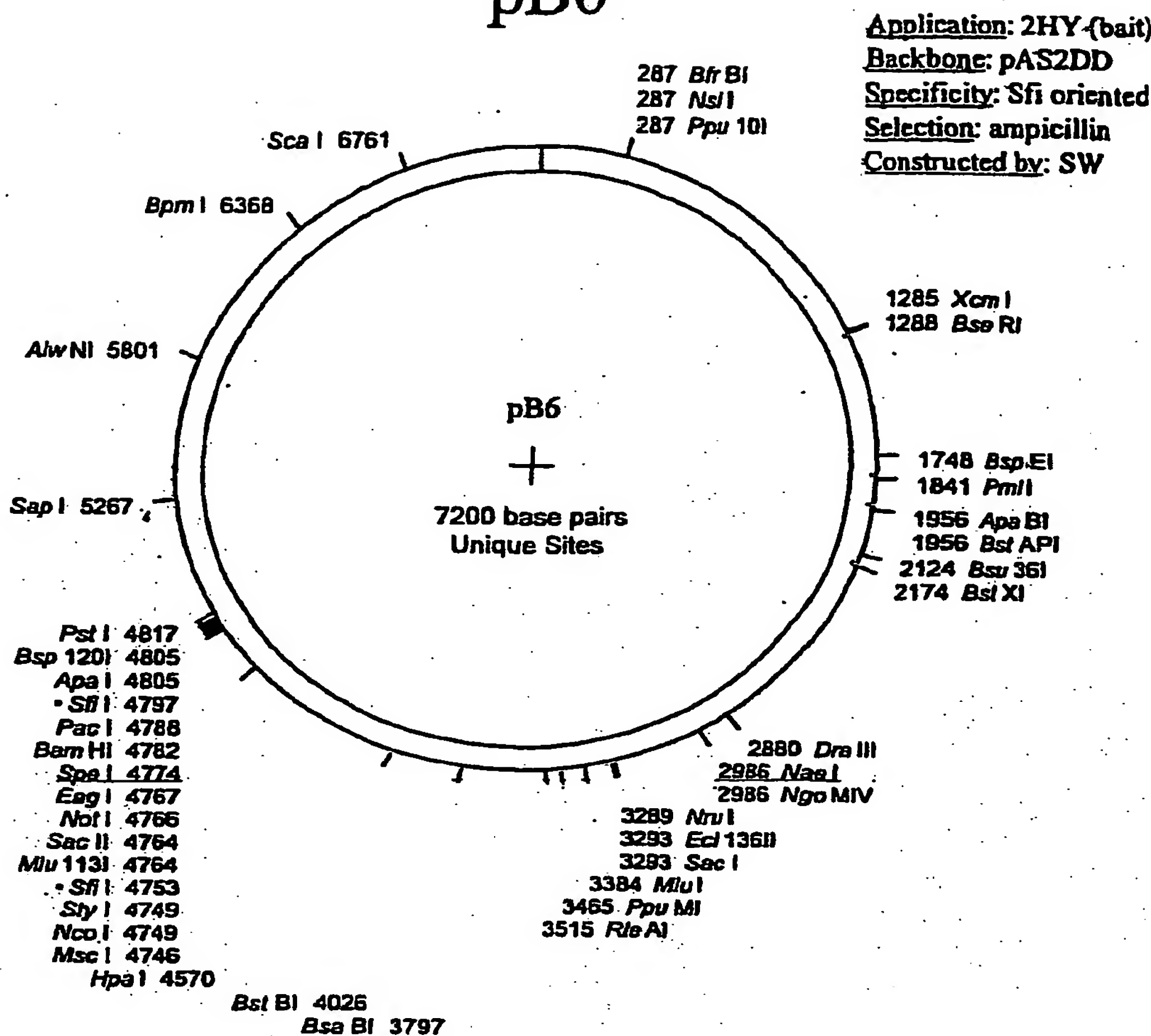
Oligo 160 5'-GAGAGTAGTAACAAAGGTC 3'

Oligo 161 5'-CATAAGAAATTCGCCCGG 3'

FIGURE 2

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pB6



Oligo 160

gagagtagtaacaaagggtc AAAGACAGTTGACTGTATCGCCG GAA TTT ATG

Sfi I Sac II Spe I Bam HI
 GCC ATG GCC GGA CGG GCC GCG GCC GCA CTA GTG GGG ATC C
 Nco I Not I

STOP Sfi I Apa I Pst I
 TT AAT **TAA** GGG CCA CTG GGG CCC CTC GAC CTG CAG CCA
 Pac I

Oligo 161

AGC TAA TT **ccgggcgaatttcttatg**

Oligo 160 5' GAGAGTAGTAACAAAGGTC3'

Oligo 161 5' CATAAGAAATTGCCCCGG3'

FIGURE 3

SUBSTITUTE SHEET (RULE-26)

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pB13

Alias: pGBT9NSI

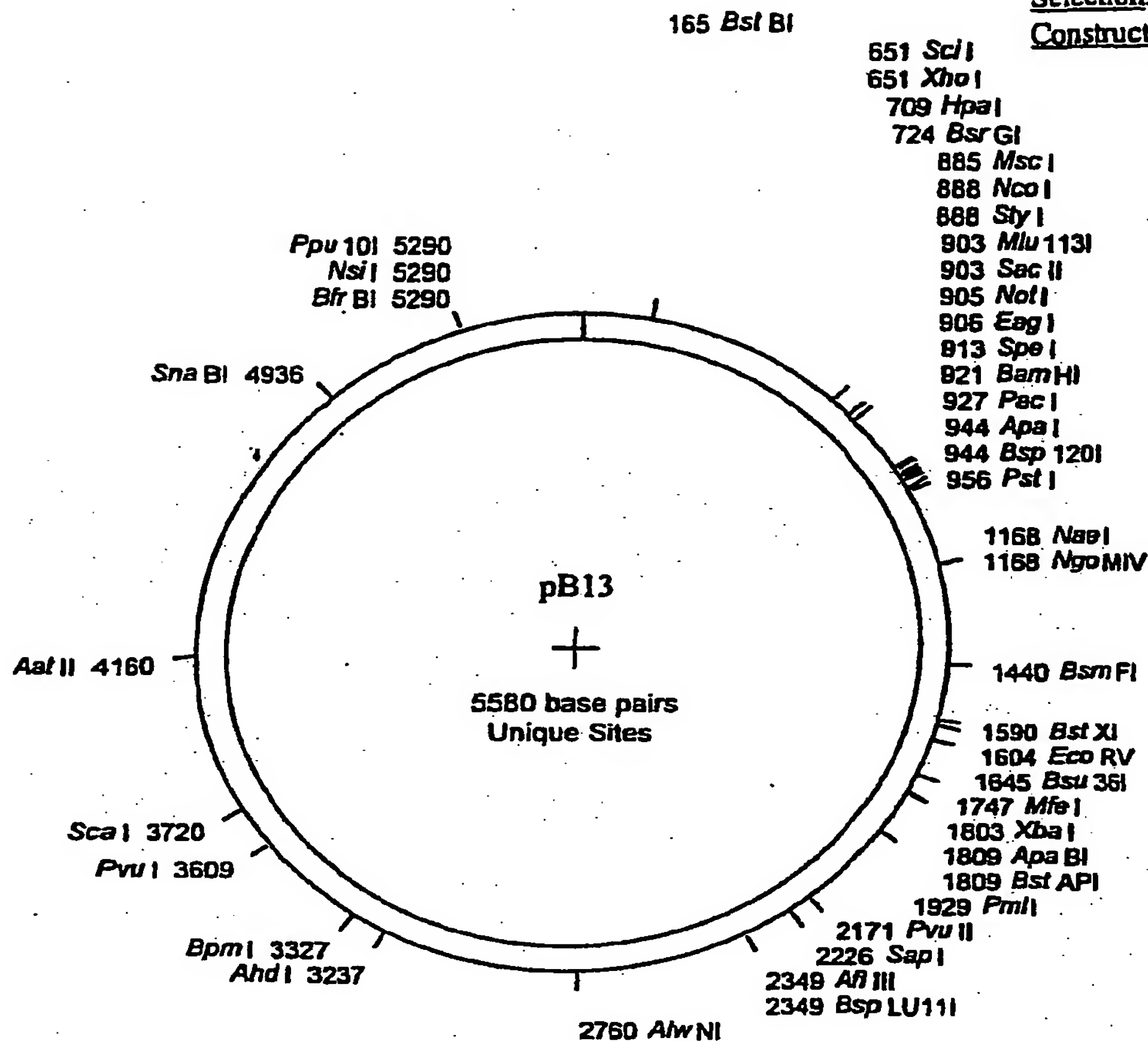
Application: 2HY (bait)

Backbone: pGBT9

Specificity: Sfi non-oriented

Selection: ampicillin

Constructed by: CR



Oligo 160

gagagtagtaacaaaggtc AAAGACAGTTGACTGTATCGCCG GAA TTT ATG

		<u>Sfi I</u>		<u>Sac II</u>				<u>Spe I</u>		<u>Bam HI</u>			
GCC	ATG	GCC	GCA	GGG	GCC	GCG	GCC	GCA	CTA	GTG	GGG	ATC	C
<u>Nco I</u>						<u>Not I</u>							
		<u>STOP</u>		<u>Sfi I</u>				<u>Pst I</u>					
TT	AAT	TAA	GGG	CCA	CTG	GGG	CCC	CTC	GAC	CTG	CAG	CCA	
<u>Pac I</u>													

Oligo 161

AGC TAA TT ccgggcgaatttcttatg

Oligo 160 5' GAGAGTAGTAACAAAGGTC3'

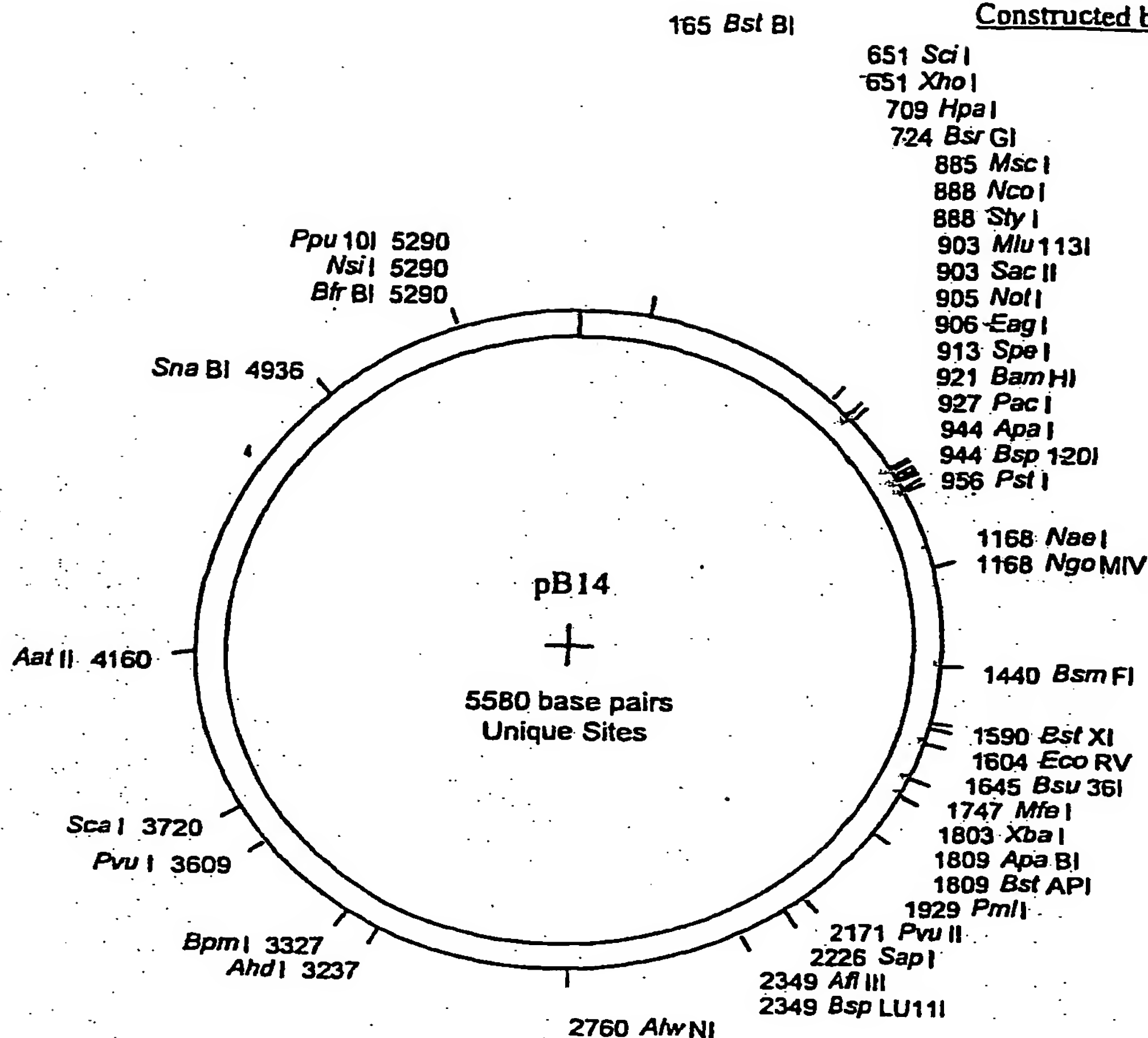
Oligo 161 5' CATAAGAAATTCGCCCCGG 3'

FIGURE 4

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pB14

Alias: pGBT9NS2
Application: 2HY (bait)
Backbone: pGBT9
Specificity: Sfi oriented
Selection: ampicillin
Constructed by: CR



Oligo 160

gagagtagtaacaaaggctc AAAGACAGTTGACTGTATCGCCG GAA TTT ATG

	Sfi I		Sac II		Spe I		Bam HI	
GCC	ATG	GCC	GGA	CGG	GCC	GCG	GCC	GCA
Nco I					Not I			CTA
								GTG
								GGG
								ATC
								C

		STOP	Sfi I		Apa I		Pst I	
TT	AAT	TAA	GGG	CCA	CTG	GGG	CCC	CTC
Pac I								GAC
								CTG
								CAG
								CCA

Oligo 161

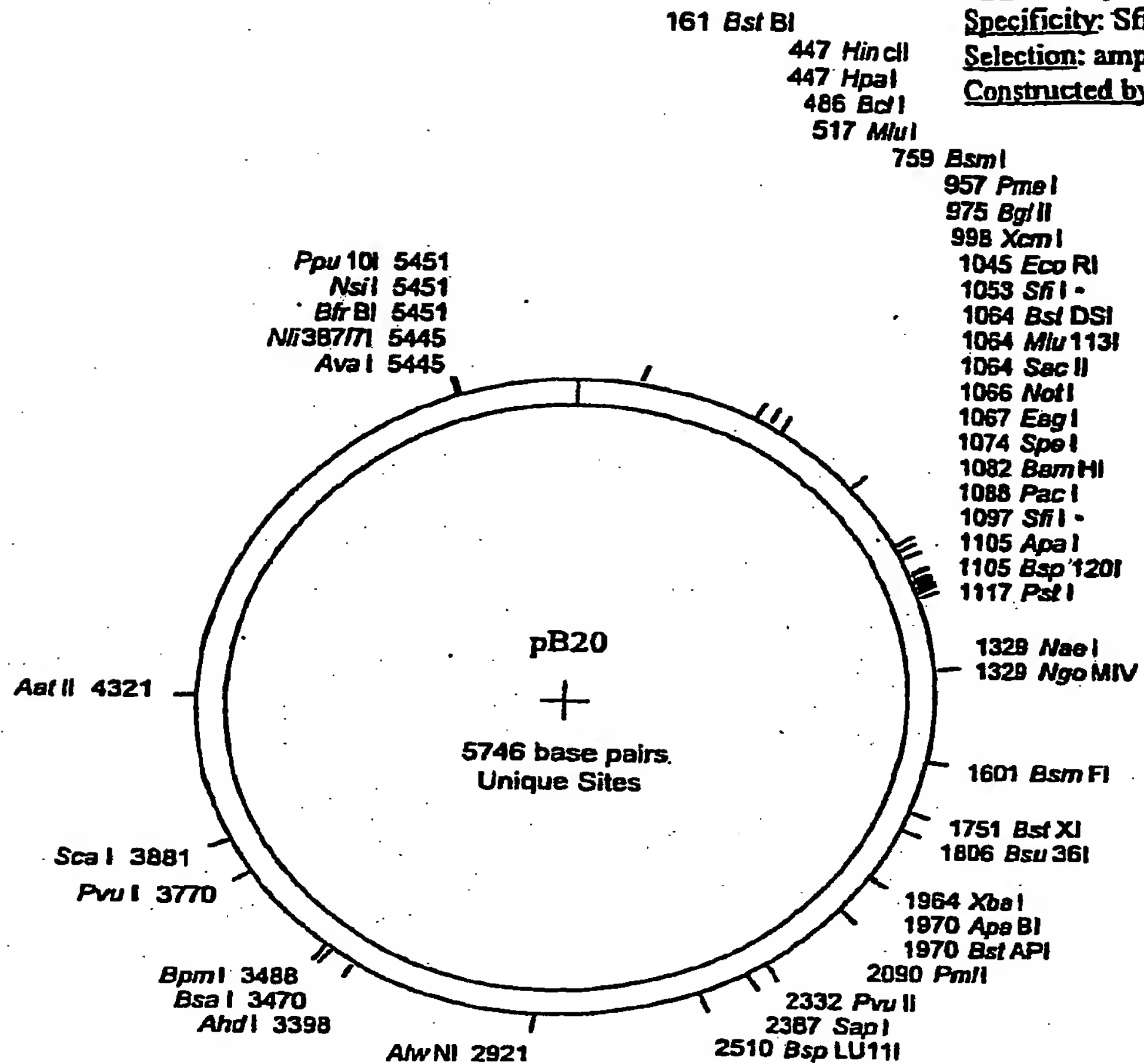
AGC TAA TT ccggggcgaattcttatg

FIGURE 5

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pB20

Alias: pLex10NS2
Application: 2HY (bait)
Backbone: pLex10 (pB9)
Specificity: Sfi-oriented
Selection: ampicillin
Constructed by: LD

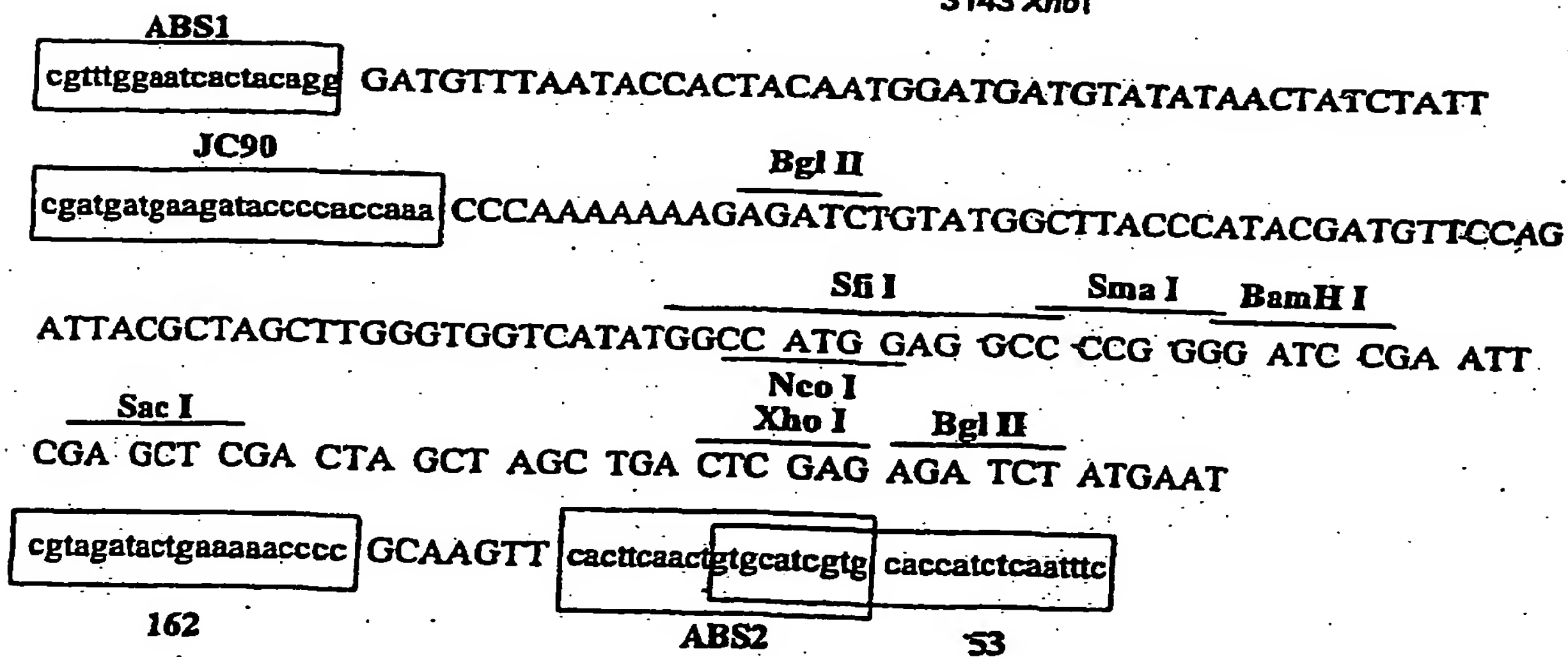
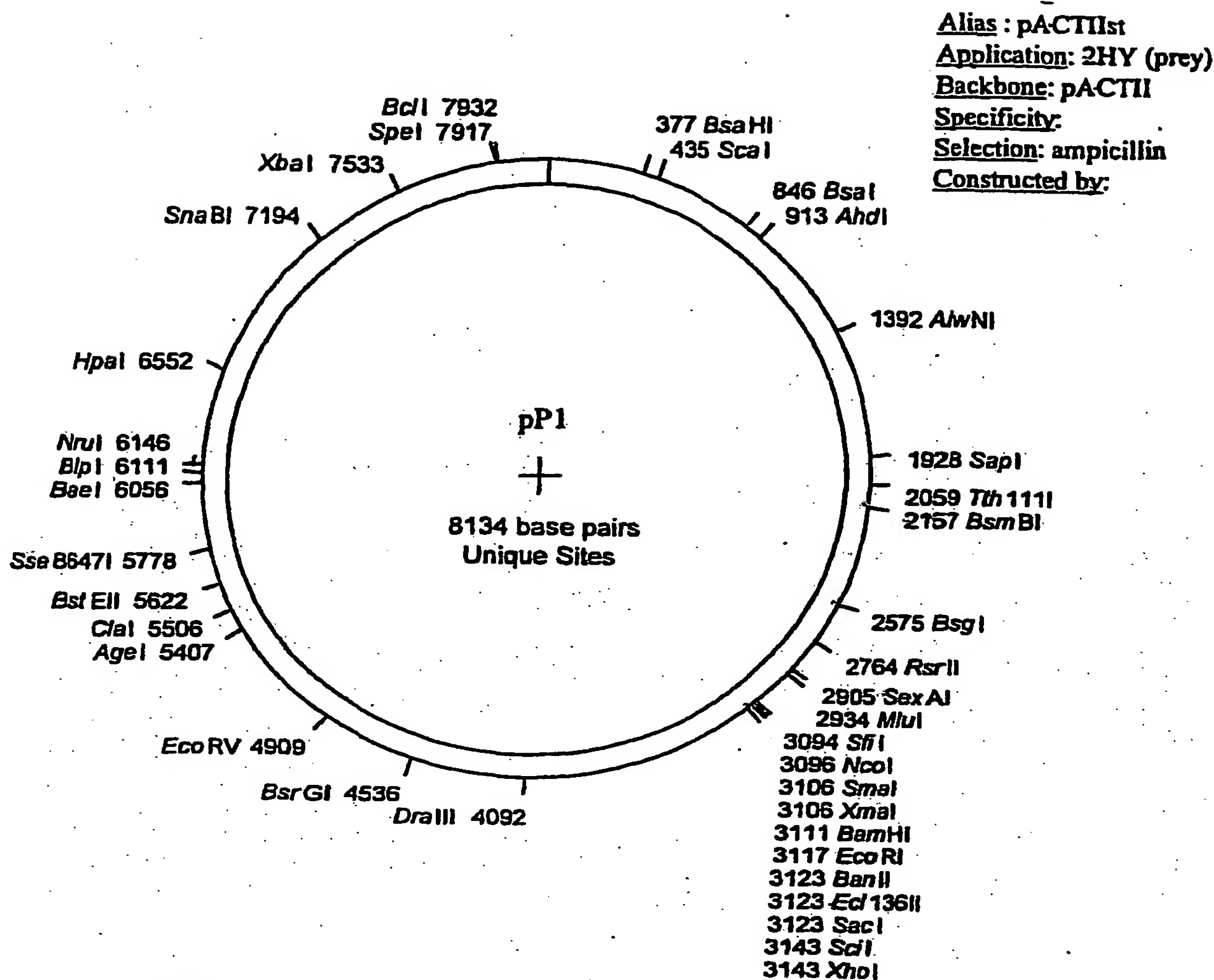


<u>EcoR I</u>		<u>Sfi I</u>		<u>Not I</u>		<u>Spe I</u>
GAA TTC	GGG GCC	GGA CGG	GCC GCG	GCC GCA	CTA GTG	
			<u>Sac II</u>			
<u>BamH I</u>		<u>STOP</u>				
GGG ATC	CTT AAT	TAA	GGG CCA	CTG GGG	CCC CTC	GAC
	<u>Pac I</u>		<u>Sfi I</u>			
<u>CTG CAG</u>						
<u>Pst I</u>						

FIGURE 6

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pP1

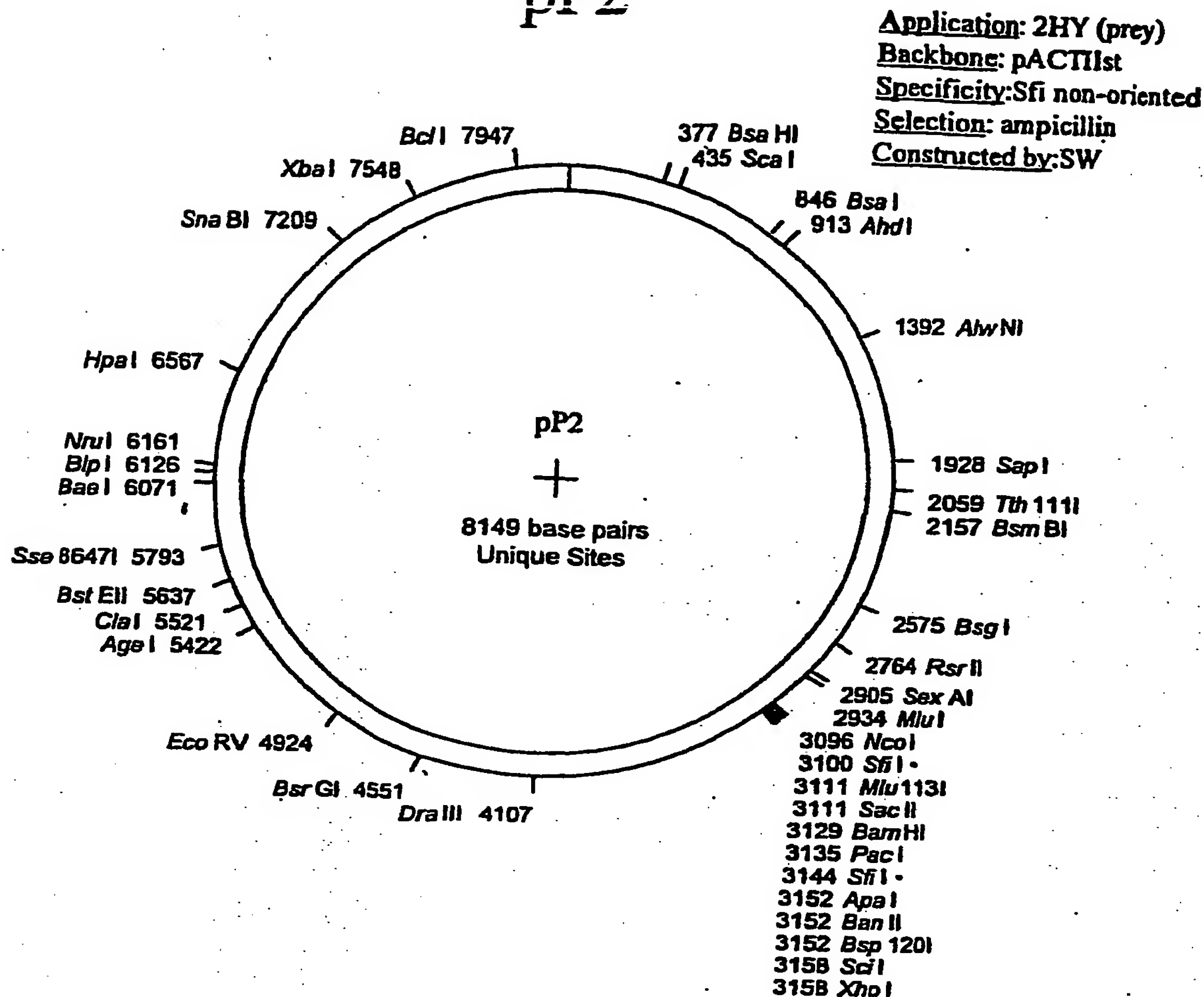


ABS1 5' CGTTTGGGAATCACTACAGG 3'
JC90 5' CGATGATGAAGATACCCACCAAA 3'
162 5' GGGGTTTTTCAGTATCTACG 3'
ABS2 5' CACGATGCACAGTTGAAGTG 3'
53 5' GAAATTGAGATGGTGCACGATGCAC 3'

FIGURE 7

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pP2



ABS1

CG cgtttgaatcactacagg GATGTTTAATACCACTACAATGGATGATGTATATAACTATCTATT

JC90

Bgl II

cgatgatgaagataccccacccaaa CCCAAAAAAGAGATCTGTATGGCTTACCCATACGATGTTCCAG

Sfi I

Sac II

ATTACGCTAGCTTGGGTGGTCATATGGCC ATG GCC GCA GGG GCC GCG GCC GCA

BamHI

Pac I

Nco I

CTA GTG GGG ATC CTT AAT TAA GGG CCA CTG GGG CCC CTC GAG AGA TCT

Stop

ATGAAT cgtagatactgaaaaacccc GCAAGTT cacttcaactgtgcatcgtg caccatctcaatttc

162

ABS2

53

ABS1 5' CGTTTGAATCACTACAGG 3'

JC90 5' CGATGATGAAGATACCCACCCAAA 3'

162 5' GGGGTTTTTTCAGTATCTACG 3'

ABS2 5' CACGATGCACAGTTGAAGTG 3'

53 5' GAAATTGAGATGGTGCACGATGCAC 3'

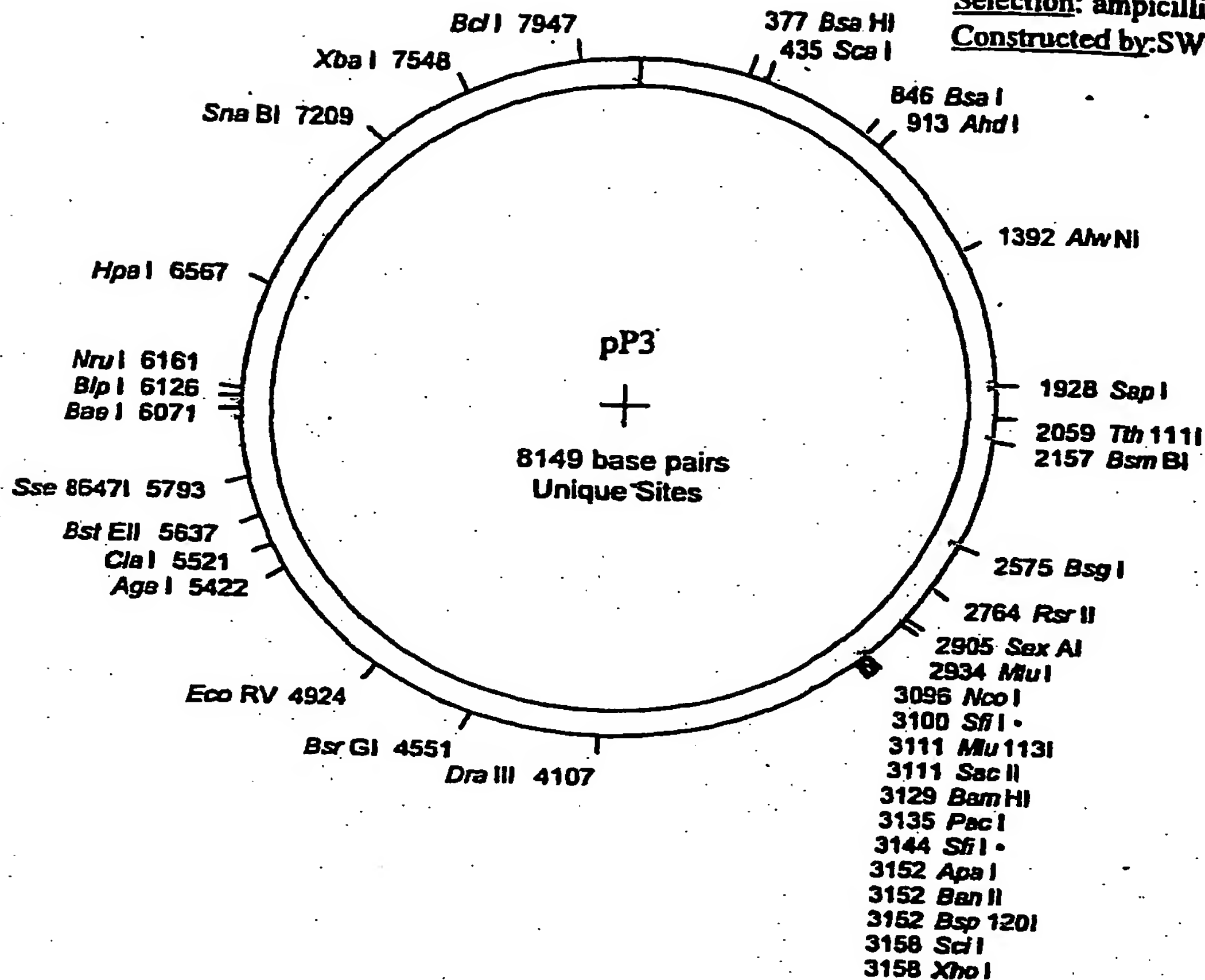
FIGURE 8

SUBSTITUTE SHEET (RULE 26)

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pP3

Application: 2HY (prey)
 Backbone: pACT11st
 Specificity: Sfi oriented
 Selection: ampicillin
 Constructed by: SW



ABS1

CG cgtttgaatcactacagg GATGTTTAATACCACTACAATGGATGATGTATATAACTATCTATT

JC90

cgatgatgaagatacccccaccaa Bgl II CCCAAAAAAGAGATCTGTATGGCTTACCCATACGATGTTCCAG

ATTACGCTAGCTTGGGTGGTCATATGGCC Sfi I Sac II ATG GCC GGA CGG GCC GCG GCC GCA

BamHI Pac I Nco I CTA GTG GGG ATC CTT AAT TAA GGG CCA CTG GGG CCC CTC GAG AGA TCT

ATGAAT cgtagatactgaaaaacccc GCAAGTT cacttcaactgtgcatcgtg caccatctcaatttc

162

ABS2

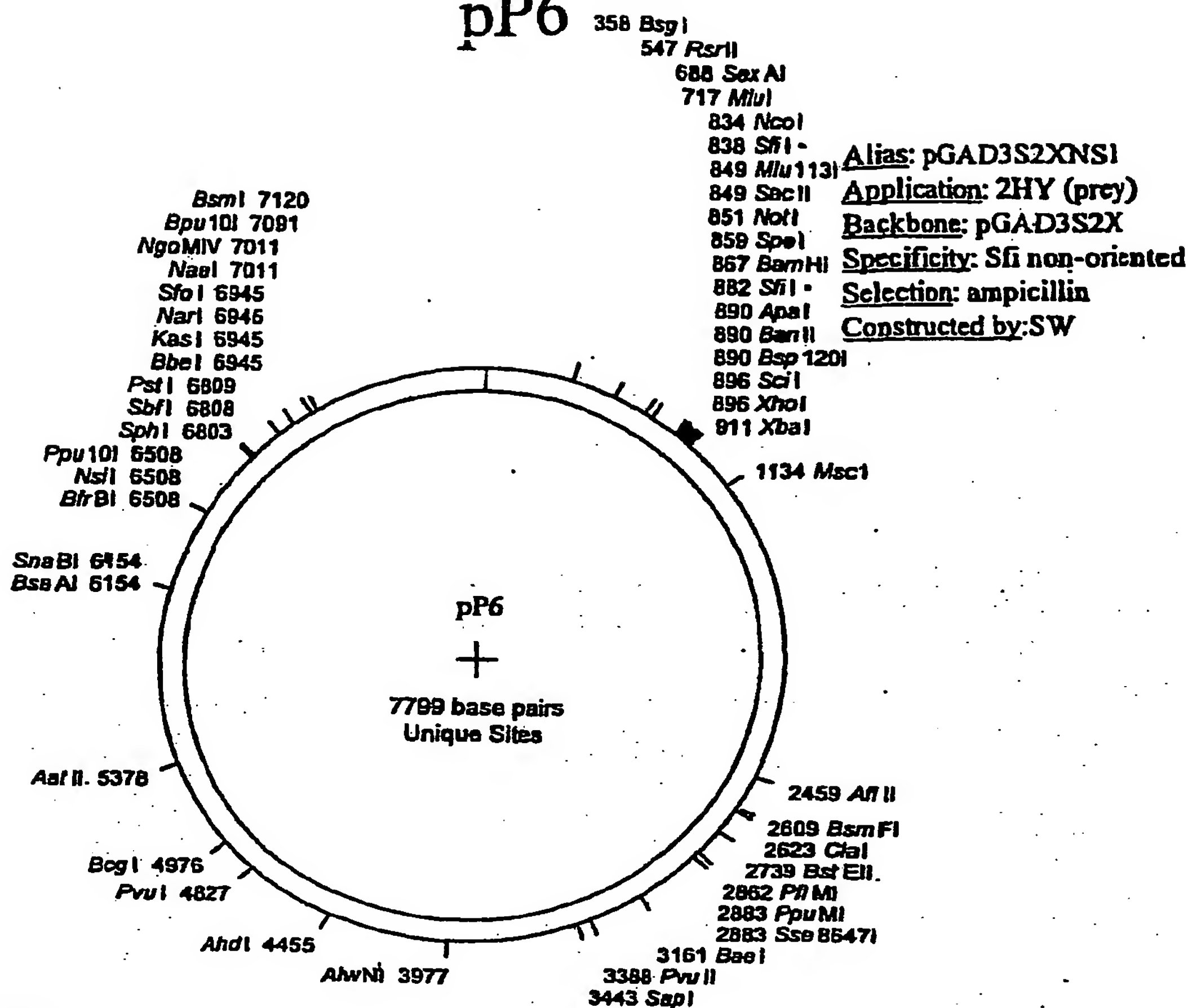
53

ABS1 5' CGTTTGAATCACTACAGG 3'
 JC90 5' CGATGATGAAGATACCCACCAAA 3'
 162 5' GGGGTTTTTCAGTATCTACG 3'
 ABS2 5' CACGATGCACAGTTGAAGTG 3'
 53 5' GAAATTGAGATGGTGCACGATGCAC 3'

FIGURE 9

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pP6



ABS1

cggttggaatcactacagg GATGTTTAATACCACTACAATGGATGATGTATATAACTATCTATT

JC90

cgatgatgaagatacccccacaaa CCCAAAAAAGAGATCCTAGAACTA

Sfi I Sac II Spe I Bam HI
 GCC ATG GCC GCA GGG GCC GCG GCC GCA CTA GTG GGG ATC C
 Nco I Not I

STOP Sfi I Xho I Xba I
 TT AAT TAA GGG CCA CTG GGG CCC CTC GAG TAG CTA GTG TGT AGA
 STOP STOP STOP

GGCCCGGTACCCAATTTCGCCCTATAGTGAGTCGTATTACAATTCACCTGGCCGTCGTTT

CAACGTCGTGACTGGGAAAACCCTGATCTATGAAT cgtagatactgaaaaacccc GCAA

GTT cactcaactgtgcatcgtg caccatctcaatttcttc

162

ABS2

53

ABS1 5' CGTTTGGGAATCACTACAGG 3'
 JC90 5' CGATGATGAAGATACCCCAACAAA 3'
 162 5' GGGGTTTTTCAGTATCTACG 3'
 ABS2 5' CACGATGCACAGTTGAAGTG 3'
 53 5' GAAATTGAGATGGTGCACGATGCAC 3'

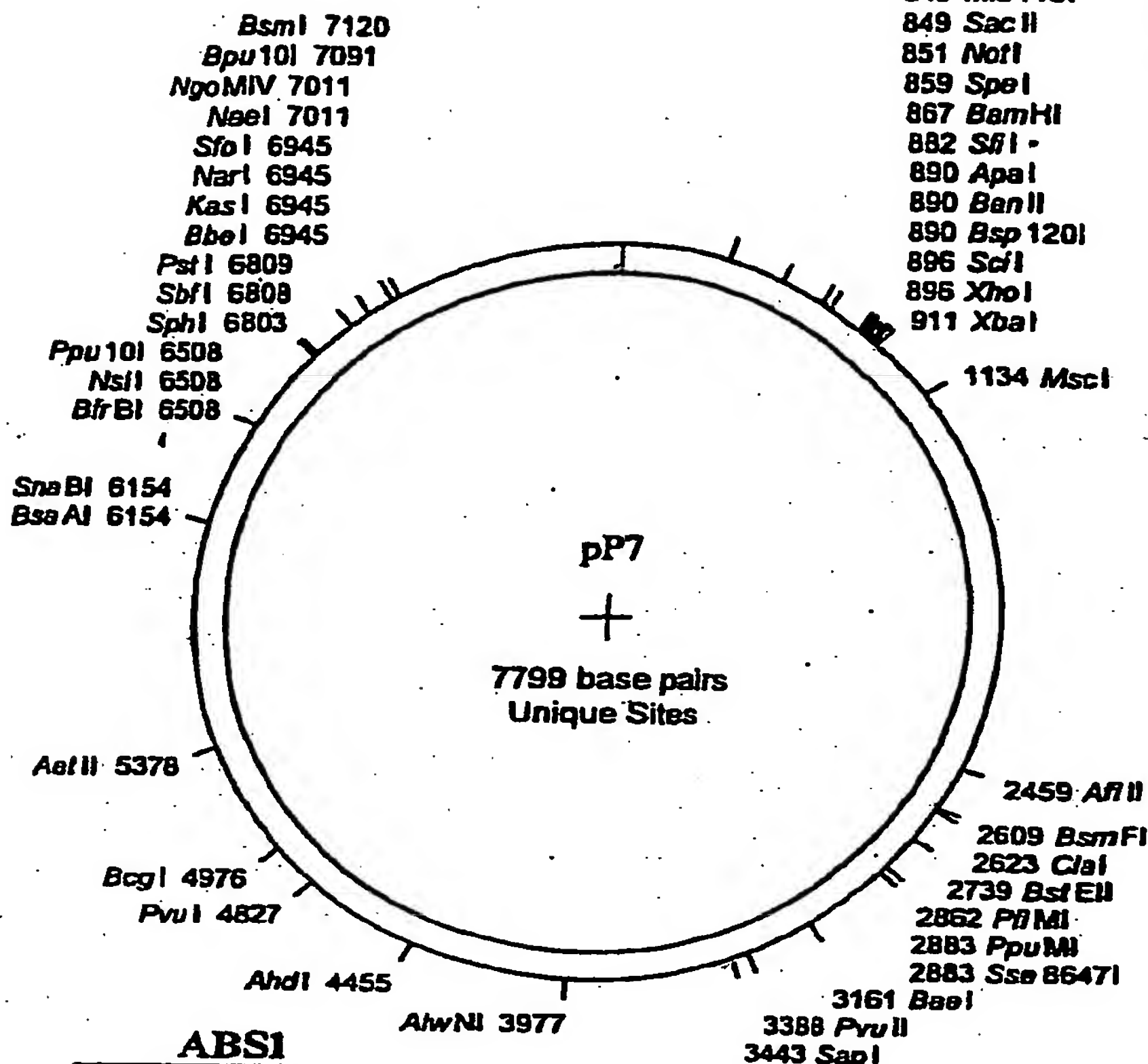
FIGURE 10

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pP7

358 BspI
547 RsrII
688 SexAI
717 MluI
834 NcoI
838 SfiI
849 Mlu113I
849 SacII
851 NotI
859 SpeI
867 BamHI
882 SfiI
890 ApaI
890 BanII
890 Bsp120I
896 SclI
896 XhoI
911 XbaI

Alias: pGAD3S2XNS2
Application: 2HY (prey)
Backbone: pGAD3S2X
Specificity: Sfi oriented
Selection: ampicillin
Constructed by: SW



ABS1
cggttggaatcactacagg GATGTTTAATACCACTACAATGGATGATGTATATAACTATCTATT

JC90
cgatgatgaagatacccccaccaa CCCTAAAAAAGAGATCCTAGAACTA

Sfi I Sac II Spe I Bam HI
GCC ATG GCC GGA CGG GCC GCG GCC GCA CTA GTG GGG ATC C
Neo I Not I

STOP Sfi I Xho I Xba I
TT AAT TAA GGG CCA CTG GGG CCC CTC GAG TAG CTA GTG TCT AGA
STOP STOP STOP

GGCCCGGTACCCAATTCGCCCTATAGTGAGTCGTATTACAATTCACCTGGCCGTCGTTT

CAACGTCGTGACTGGGAAAACCCTGATCTATGAAT cgtagatactgaaaaacccc GCAA

GTT cacttcaactgtgcatcgtg caccatctcaattctt

162

ABS2

53

ABS1: 5' CGTTTGGAATCACTACAGG 3'
JC90: 5' CGATGATGAAGATACCCACCAAA 3'
162: 5' GGGGTTTTTCAGTATCTACG 3'
ABS2: 5' CACGATGCACAGTTGAAGTG 3'
53: 5' GAAATTGAGATGGTGCACGATGCAC 3'

FIGURE 11

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VECTORS EXPRESSING THE T25 FRAGMENT

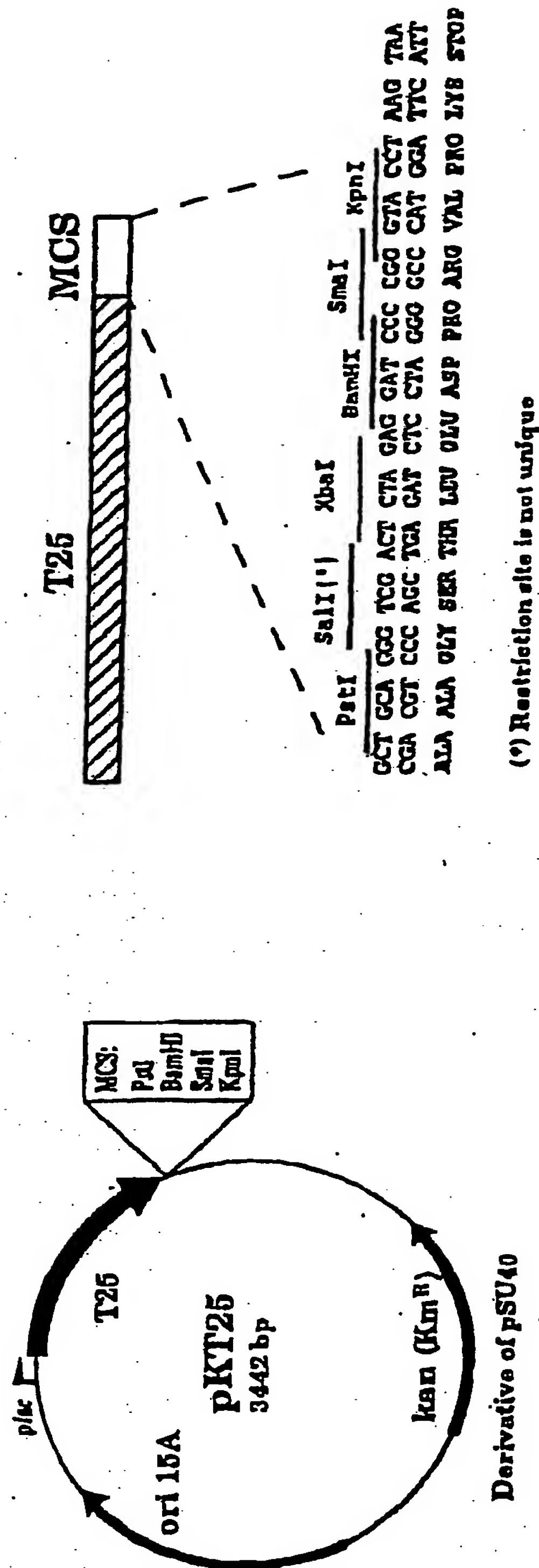
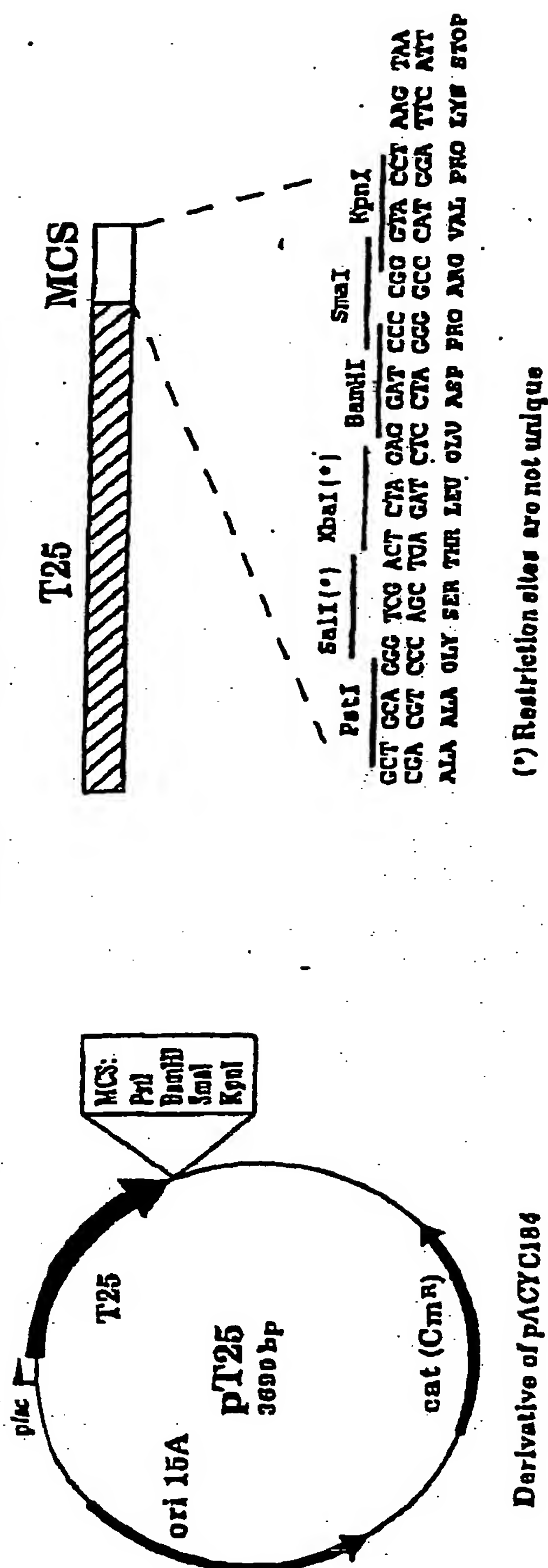


FIGURE 12

VECTORS EXPRESSING THE T18 FRAGMENT

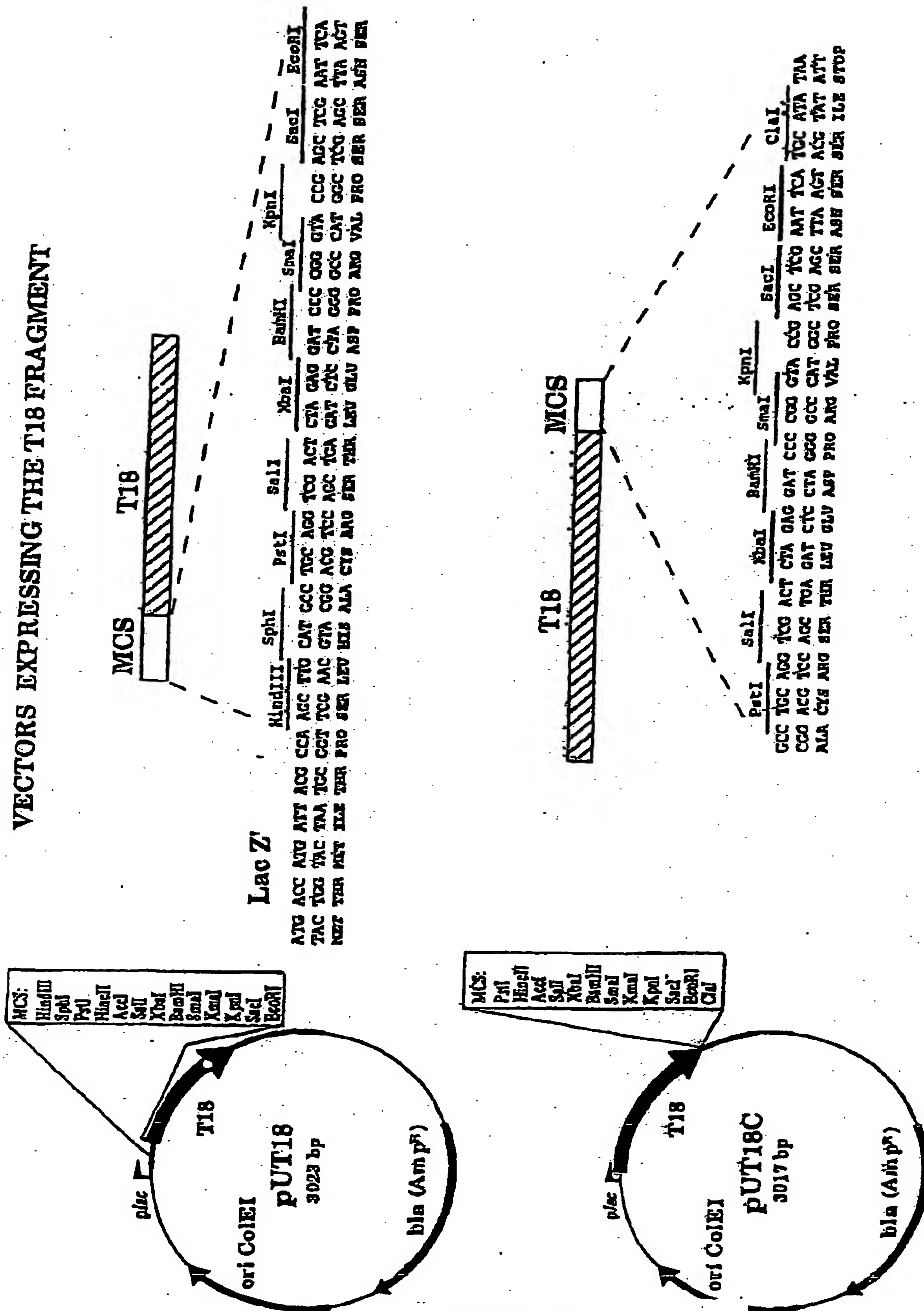
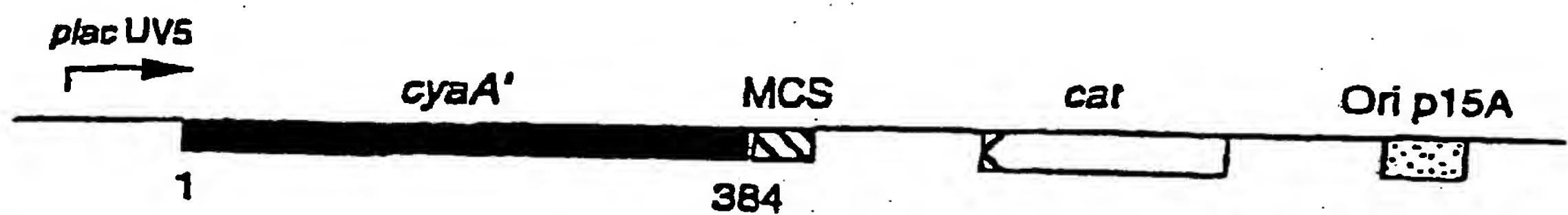
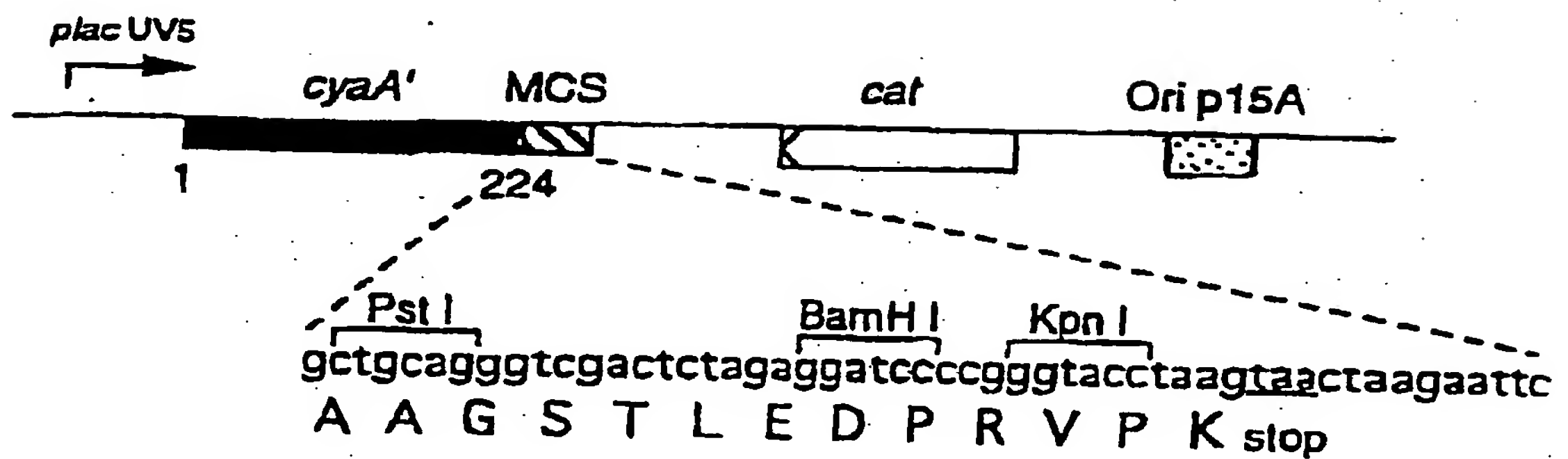


FIGURE 13

pCmAHL1



pT25



pT18

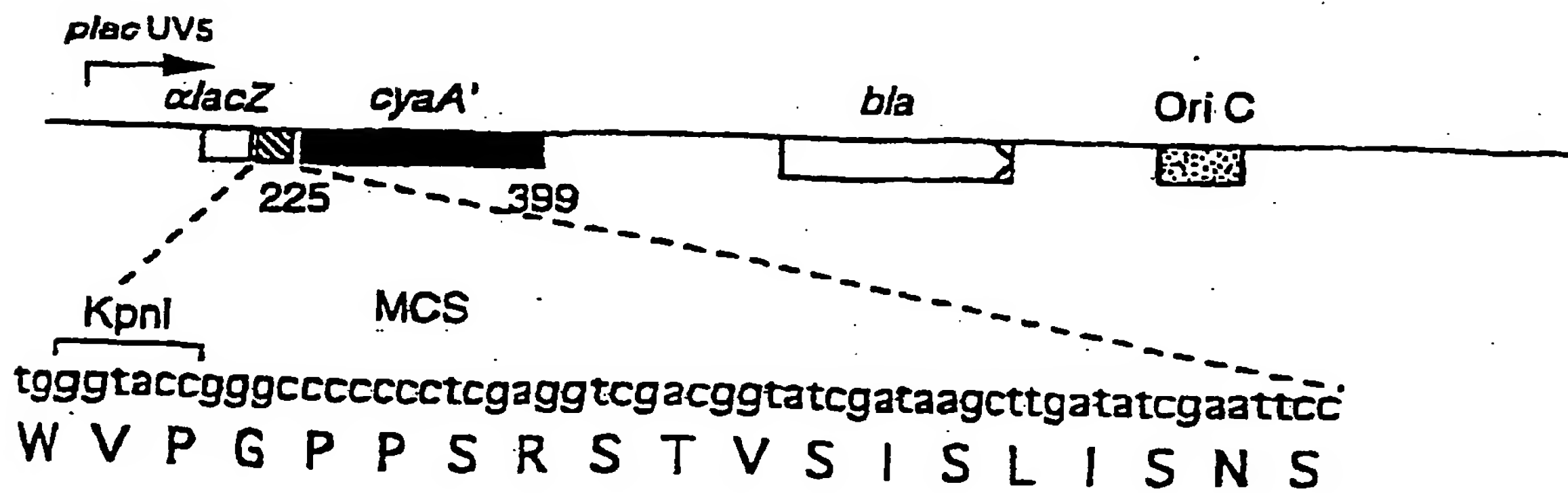
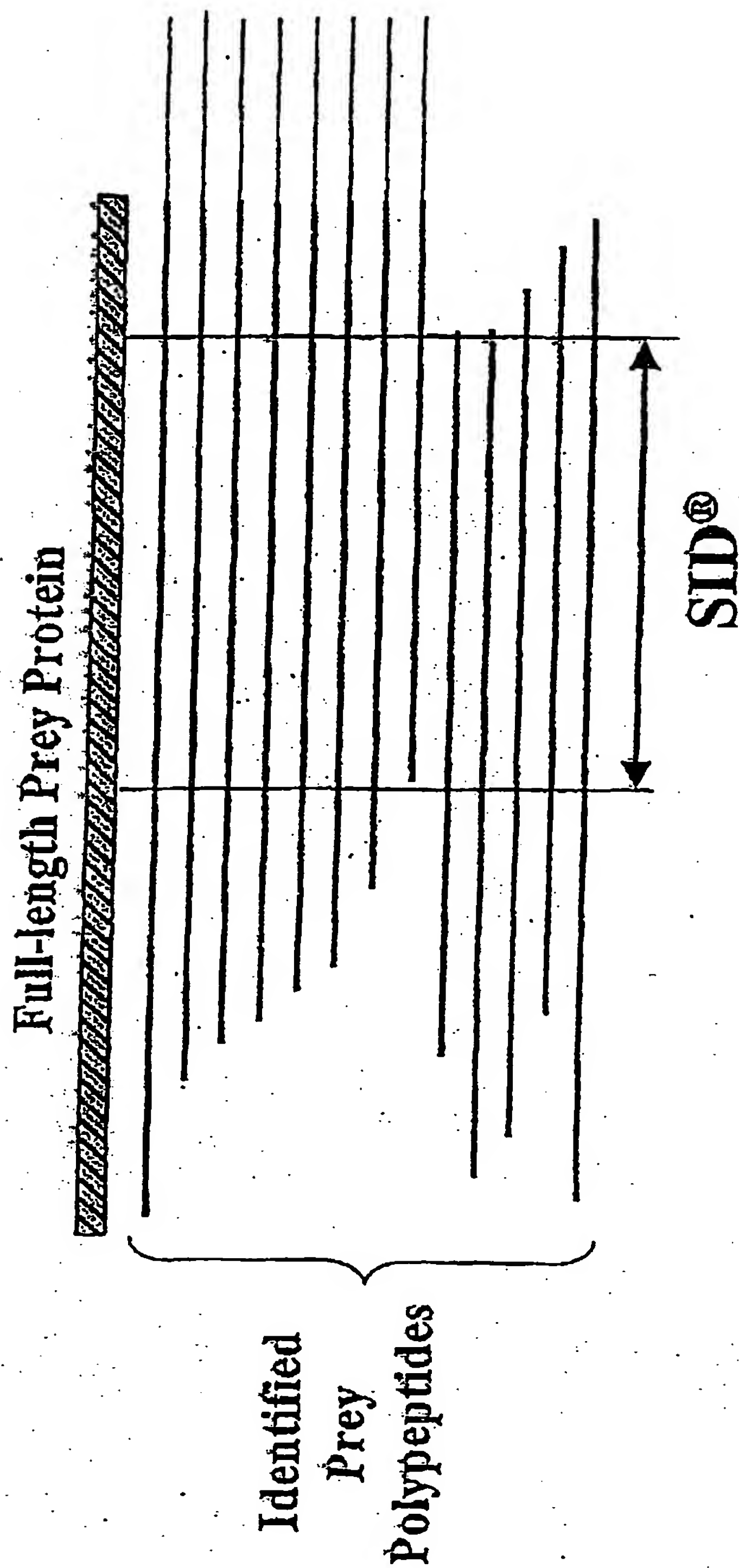


FIGURE 14

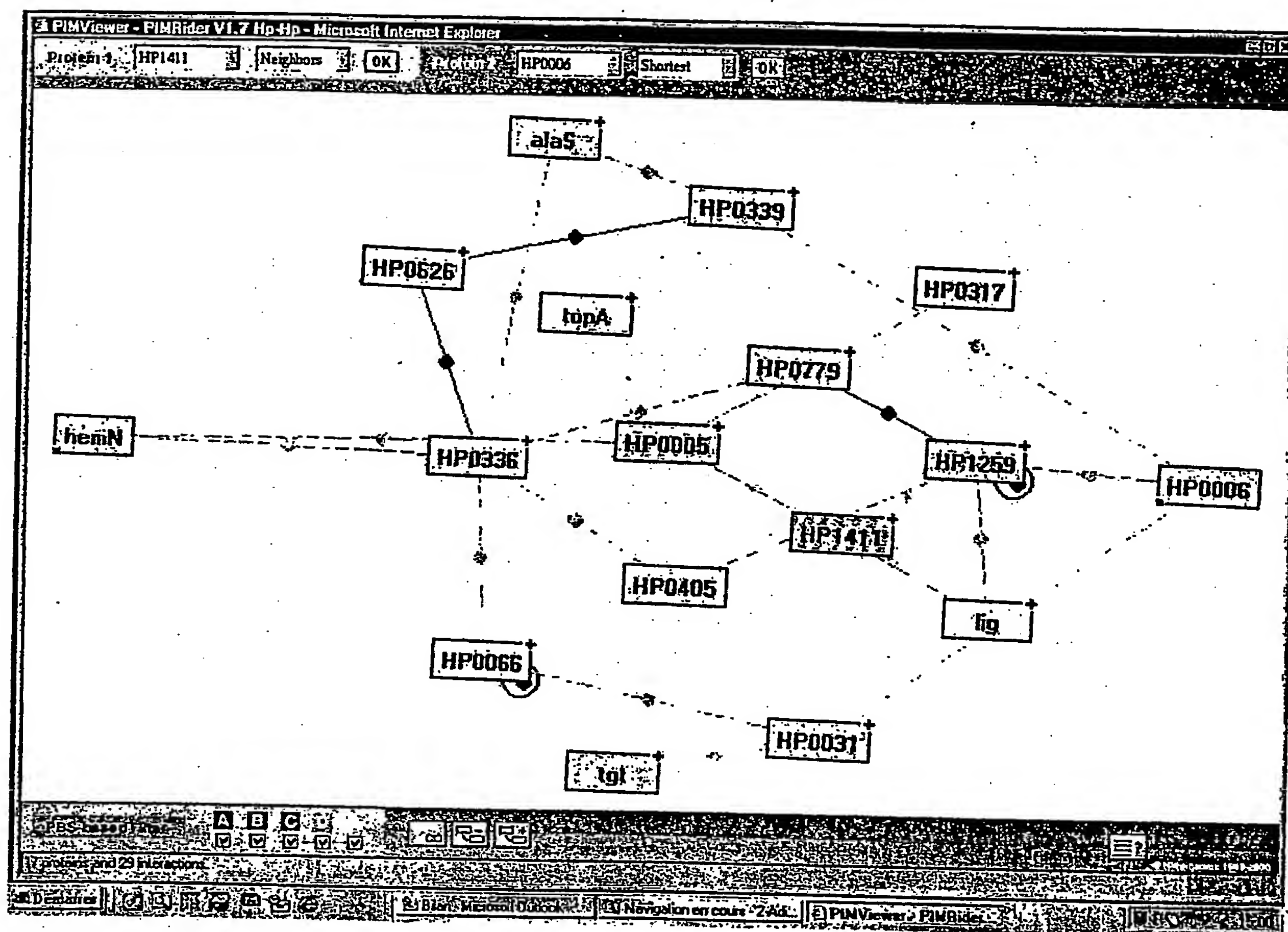
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Schematic representation of SID® determination

FIGURE 15

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Exemple of Protein Interaction Map

FIGURE 16

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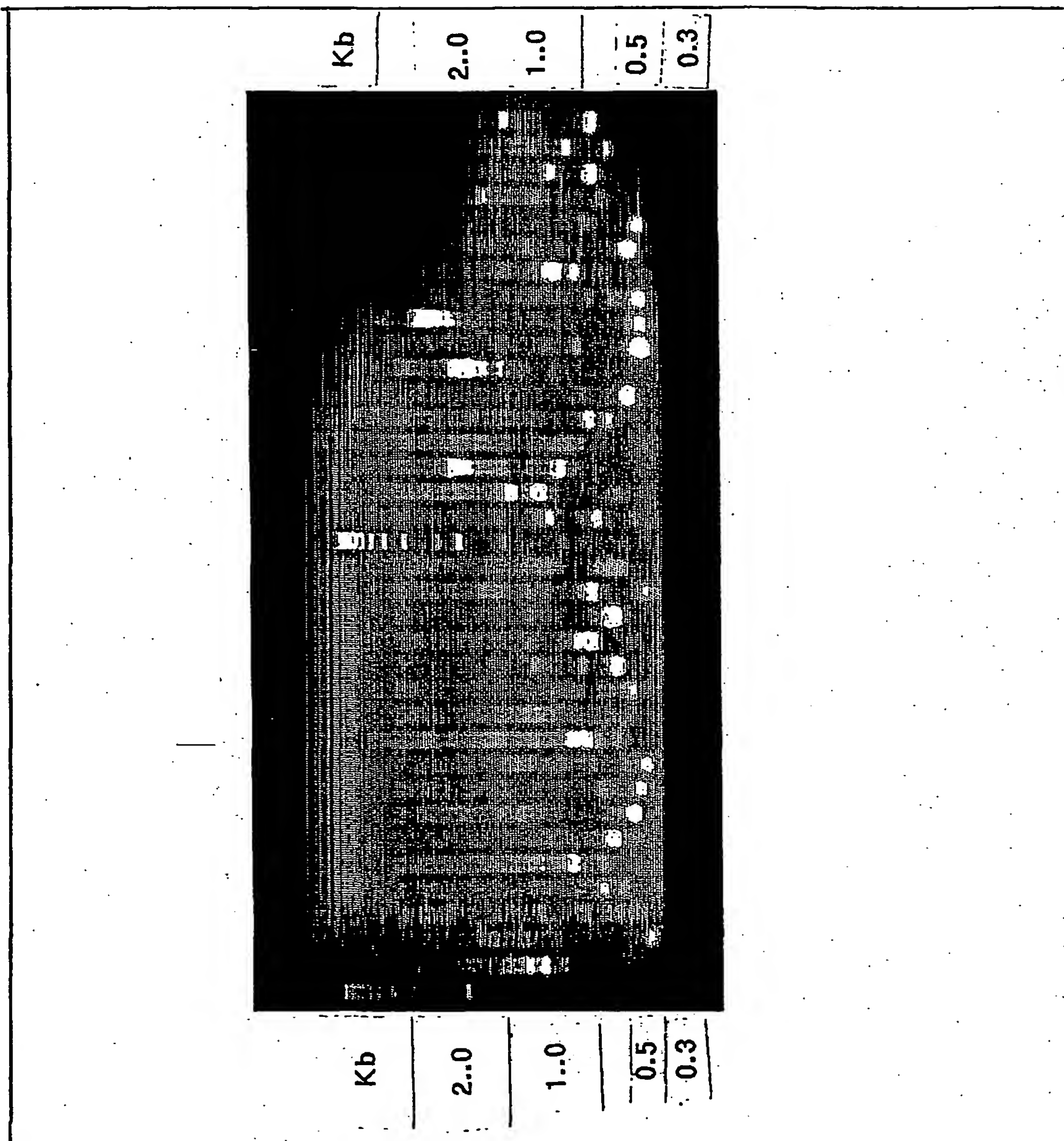


FIGURE 17

Procedure for the classification of the genes

H. pylori (HAS141) transformation:

4 independent patches: 1 µg super-coiled DNA/patch

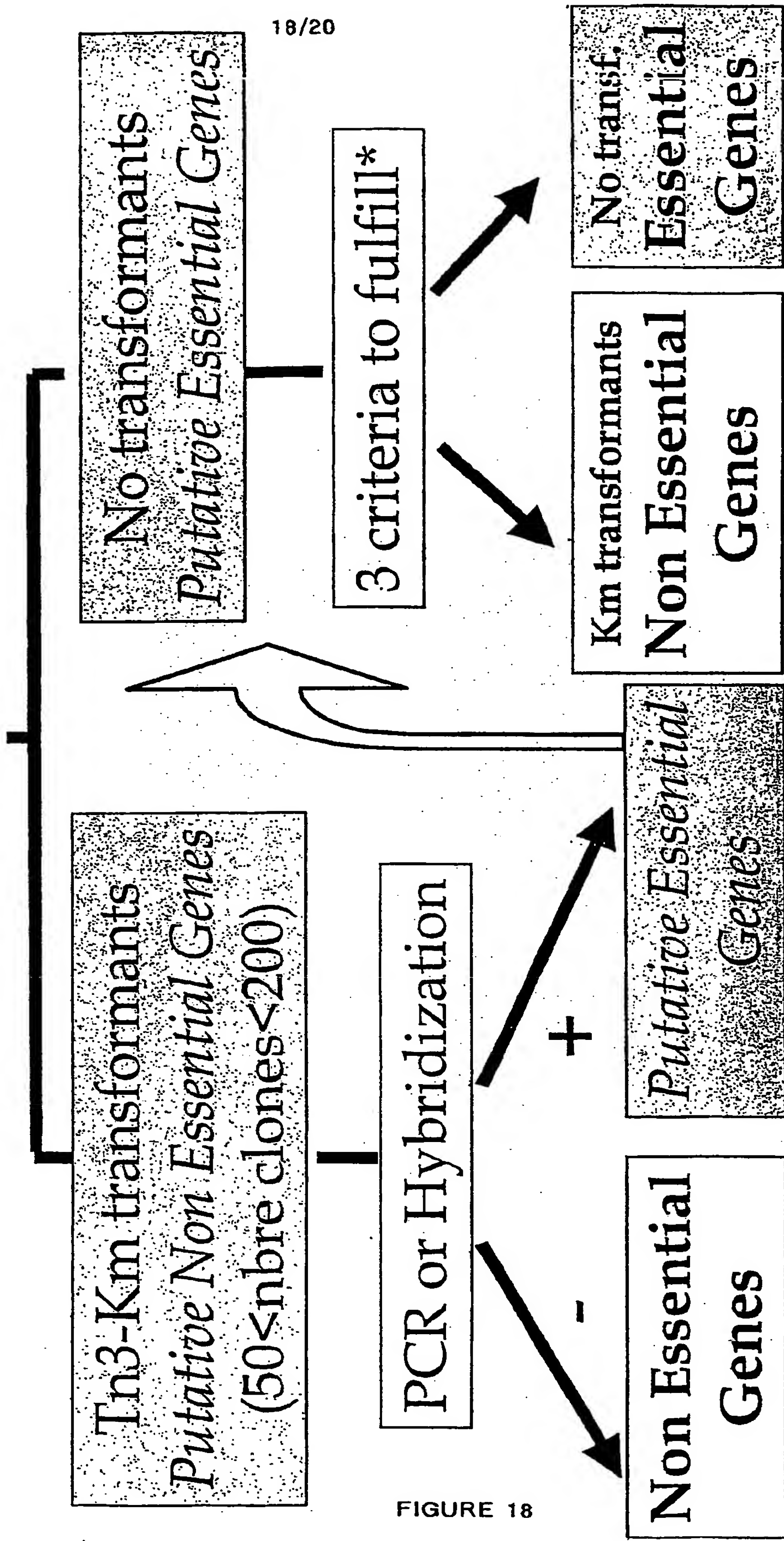


FIGURE 18

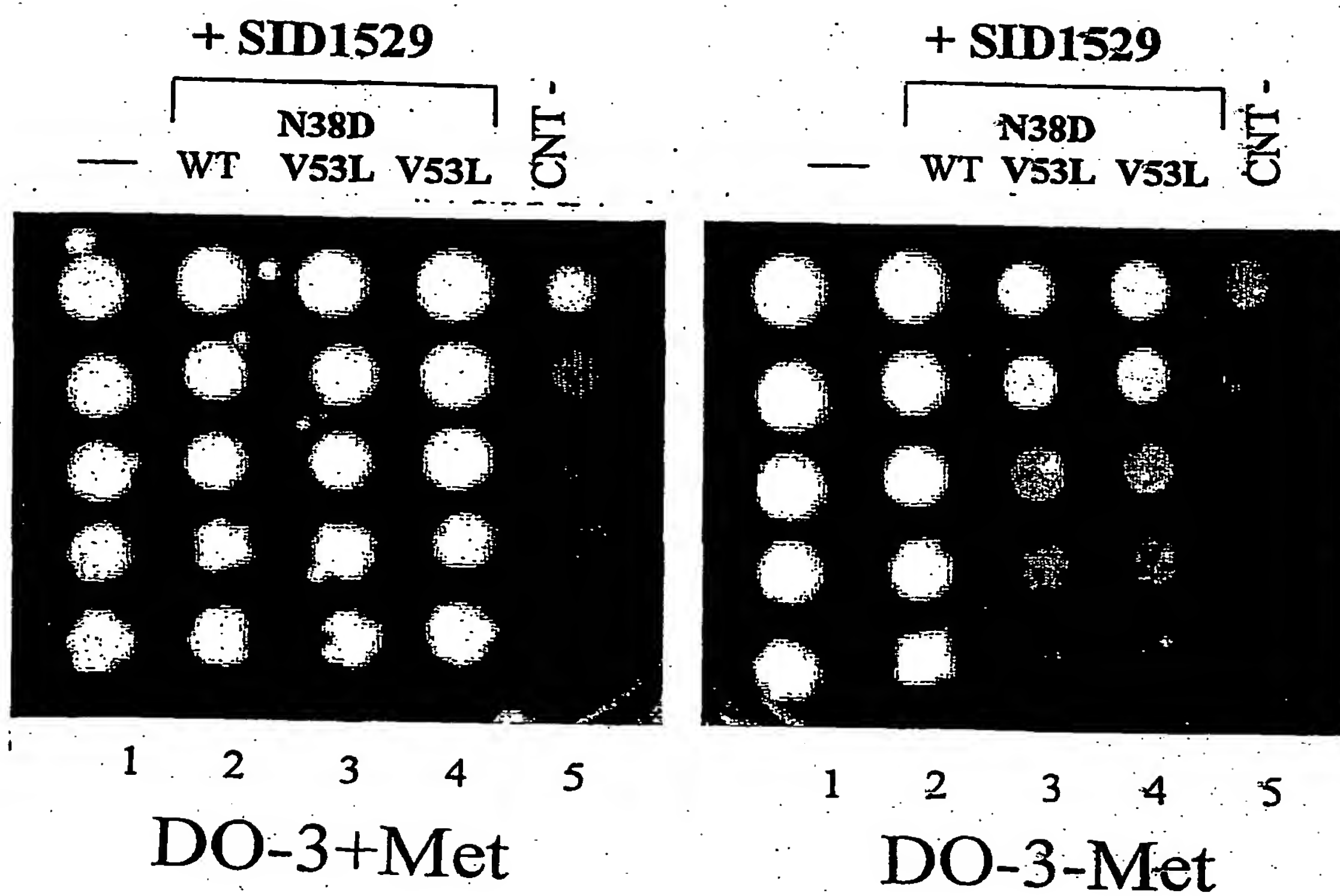
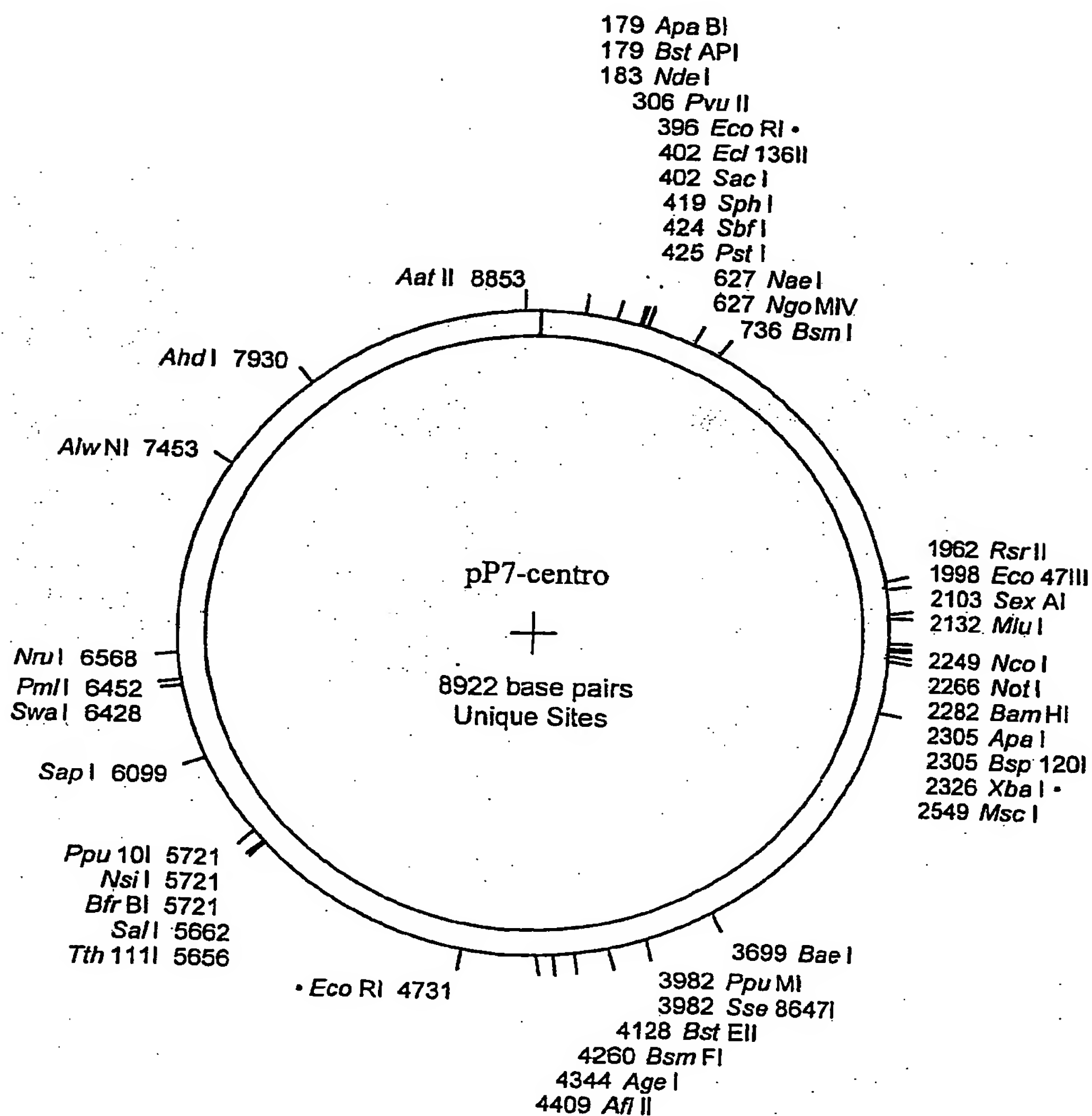


FIGURE 19

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pP7-centro



ATGGCCGgAcGGGCCGCGGCCGCACTAGTGGGGATCCTTAATTAAGGG
 NotI BamHI
 CCACTGGGGCCCCTCGAGTAGCTAGTGTCTAGAGGCCCGGTACCCAATT

FIGURE 20

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International Bureau



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29 August 2002 (29.08.2002)

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60/259,302 2 January 2001 (02.01.2001) US

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(81) Designated States (national): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG,
SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,
VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM,
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GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent
(BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments

(88) Date of publication of the international search report:
20 November 2003

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: PROTEIN-PROTEIN INTERACTIONS IN *HELICOBACTER PYLORI*

(57) Abstract: The present invention relates to protein-protein interactions of *Helicobacter pylori*. More specifically, the present invention relates to complexes of polypeptides or polynucleotides encoding the polypeptides, fragments of the polypeptides, anti-
bodies to the complexes, Selected Interacting Domains (SID[®]) which are identified due to the protein-protein interactions, methods
for screening drugs for agents which modulate the interaction of proteins and pharmaceutical compositions that are capable of mod-
ulating the protein-protein interactions.



WO 02/066501 A3

INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP 01/15428

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C07K14/205 C12N15/31 G01N33/68 C12N15/63 A61K39/106
A61K35/74

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07K C12N G01N A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EP0-Internal, BIOSIS

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 00 66722 A (SELIG LUC ;HYBRIGENICS S A (FR); LEGRAIN PIERRE (FR); RAIN JEAN CH) 9 November 2000 (2000-11-09) cited in the application the whole document	1
A	LEGRAIN P ET AL: "Genome-wide protein interaction maps using two-hybrid systems" FEBS LETTERS, ELSEVIER SCIENCE PUBLISHERS, AMSTERDAM, NL, vol. 480, no. 1, 25 August 2000 (2000-08-25), pages 32-36, XP004337490 ISSN: 0014-5793 cited in the application the whole document	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

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Date of the actual completion of the international search

20 June 2003

Date of mailing of the international search report

- 9. 09. 2003

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Authorized officer

Hix, R.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 01/15428

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	CHALKER ALISON F ET AL: "Systematic identification of selective essential genes in Helicobacter pylori by genome prioritization and allelic replacement mutagenesis." JOURNAL OF BACTERIOLOGY, vol. 183, no. 4, 2001, pages 1259-1268, XP002245013 ISSN: 0021-9193 cited in the application the whole document -----	
A	TOMB J-F ET AL: "THE COMPLETE GENOME SEQUENCE OF THE GASTRIC PATHOGEN HELICOBACTER PYLORI" NATURE, MACMILLAN JOURNALS LTD. LONDON, GB, vol. 388, no. 6642, 7 August 1997 (1997-08-07), pages 539-547, TABEL, XP002062106 ISSN: 0028-0836 cited in the application the whole document -----	
A	WO 99 42612 A (FROMONT MICHELINE ; LEGRAIN PIERRE (FR); PASTEUR INSTITUT (FR); RAI) 26 August 1999 (1999-08-26) cited in the application the whole document -----	

INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP 01/15428

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☒ Claims Nos.: 1-3, 6-18
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

none

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

Invention 1 : claims 1-3

A complex of protein-protein interactions in *Helicobacter pylori* as defined in Table 1 and Table 8, polynucleotides encoding therefor, recombinant host cells expressing said interacting polypeptides.

NB. Invention 1 involves a vast number of separate inventions however due to the nature of Tables 1 and 8, it is not possible to subdivide the inventions further.

Invention 2: claims 4, 5 and 15

A method of selecting a modulating compound in *Helicobacter pylori* according to claim 4, a modulating compound obtained therefrom and pharmaceutical composition comprising said modulating compound.

Inventions 3-3257: claims 6 to 14 and 16 to 18 (partially):

A Selected Interacting Domain (SID) polypeptide in *Helicobacter pylori* comprising the even Nos. 2 to 3256 in column 3 of Table 2, a SID polynucleotide in *Helicobacter pylori* comprising the uneven SEQ ID NOs 1 to 3255 in column 2 of Table 2, a fragment or variant of said SID polypeptide or SID polynucleotide, a vector and host cell comprising said SID polypeptide, a pharmaceutical composition comprising said SID polypeptide or said recombinant host cells and a protein chip comprising said polypeptides.

Inventions 3258-3262: claims 6 to 14 and 16 to 18 (partially):

A Selected Interacting Domain (SID) polypeptide in *Helicobacter pylori* comprising the even Nos. 6590 to 6594 in Table 7, a SID polynucleotide in *Helicobacter pylori* comprising the uneven SEQ ID NOs 6589 to 6593 in Table 7, a fragment or variant of said SID polypeptide or SID polynucleotide, a vector and host cell comprising said SID polypeptide, a pharmaceutical composition comprising said SID polypeptide or said recombinant host cells and a protein chip comprising said polypeptides.

Inventions: 3263-3312: claims 6 to 14 and 16 to 18 (partially):

Continuation of Box 1.2

Claims Nos.: 1-3, 6-18

Present claims 1-3, 6-18 relate to an extremely large number of possible products. In fact, the claims contain so many options, variables, possible permutations and provisos particularly in the light of the protein-protein interactions defined in Table 1 and Table 8, that a lack of clarity and conciseness within the meaning of Article 6 PCT arises to such an extent as to render a meaningful search of the claims impossible.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.5), should the problems which led to the Article 17(2) declaration be overcome.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP 01/15428

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 0066722	A	09-11-2000	CA 2371596 A1	09-11-2000
			EP 1173560 A1	23-01-2002
			WO 0066722 A1	09-11-2000
			JP 2002542821 T	17-12-2002
			US 2003017478 A1	23-01-2003

WO 9942612	A	26-08-1999	US 6187535 B1	13-02-2001
			EP 1055000 A1	29-11-2000
			WO 9942612 A1	26-08-1999
			US 2003134268 A1	17-07-2003
			US 6531284 B1	11-03-2003

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

A Selected Interacting Domain (SID) polypeptide in Helicobacter pylori comprising the even Nos. 6596 to 6644 Table 8, a SID polynucleotide in Helicobacter pylori comprising the uneven SEQ ID NOs 6595 to 6643 in Table 8, a fragment or variant of said SID polypeptide or SID polynucleotide, a vector and host cell comprising said SID polypeptide, a pharmaceutical composition comprising said SID polypeptide or said recombinant host cells and a protein chip comprising said polypeptides.

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